ELSEVIER

Applied Surface Science 244 (2005) I–X

applied surface science

www.elsevier.com/locate/apsusc

Author Index

Aagata, Y., see Yasuda, K. 244 (2005) 347
Abe, T., see Murai, H. 244 (2005) 351
Agalya, G., C. Lv, X. Wang, M. Koyama, M. Kubo and A. Miyamoto, Theoretical study on the electronic and molecular properties of ground and excited states of ethylenedioxythiophene and styrenesulphonic acid 244 (2005) 195
Agalya, G., see Lv, C. 244 (2005) 541
Akimoto, K., see Emoto, T. 244 (2005) 55
Akimoto, K., see Terasawa, N. 244 (2005) 16
Akinaga, H., see Sun, Z.G. 244 (2005) 489
Akiyama, T., see Ishizaki, H. 244 (2005) 186
Akiyama, T., see Ito, T. 244 (2005) 170
Akiyama, T., see Ito, T. 244 (2005) 178
Akiyama, T., see Kawamoto, K. 244 (2005) 182
Akiyama, T., see Takeda, Y. 244 (2005) 485
Amekura, H., see Plaksin, O.A. 244 (2005) 79
Anantathanasarn, S., see Shiozaki, N. 244 (2005) 71
Anma, Y., see Medvid, A. 244 (2005) 120
Antos, R., I. Ohlidal, D. Franta, P. Klapetek, J. Mistrik, T. Yamaguchi and S. Visnovsky, Spectroscopic ellipsometry on sinusoidal surface-relief gratings 244 (2005) 221
Antos, R., I. Ohlidal, J. Mistrik, K. Murakami, T. Yamaguchi, J. Pistora, M. Horie and S. Visnovsky, Spectroscopic ellipsometry on lamellar gratings 244 (2005) 225
Antos, R., see Mistrik, J. 244 (2005) 51
Aoki, T., see Gnatyuk, V.A. 244 (2005) 528
Aoki, T., see Ishihara, J. 244 (2005) 381
Aoki, T., see Jayatissa, A.H. 244 (2005) 453
Aoki, T., see Nakamura, A. 244 (2005) 385
Aoki, T., see Ohara, K. 244 (2005) 369
Aoki, T., see Sakuma, S. 244 (2005) 458
Aoki, T., see Sirghi, L. 244 (2005) 408
Aoyagi, S., see Kawashima, Y. 244 (2005) 43
Aoyama, M., see Gao, Y.Z. 244 (2005) 297
Aoyama, M., see Mistrik, J. 244 (2005) 51
Arai, K., see Fujii, Y. 244 (2005) 230
Arai, Y., H. Kominami, Y. Nakanishi and Y. Hatanaka, Luminescent properties of $SrGa_2S_4$:Eu thin film phosphors deposited by two electron beam evaporation 244 (2005) 473
Asano, K., see Ito, T. 244 (2005) 178
Ashok, S., Hydrogen and helium interactions in Si: phenomena obscure and not-so-obscure 244 (2005) 2
Azuma, Y., see Tan, R. 244 (2005) 21
Bada, K., see Kurokawa, H. 244 (2005) 636
Bakhmetjev, V.V., see Sychov, M.M. 244 (2005) 461
Bittar, A., see Metson, J.B. 244 (2005) 264
Bourgeois, S., B. Domenichini, Z. Li and P.J. Møller, Titanium dioxide surface stoichiometry and ordering studied by resonant photoemission spectroscopy 244 (2005) 399
Bourgeois, S., see Domenichini, B. 244 (2005) 403
Bradley, S.T., see Brillson, L.J. 244 (2005) 257
Brevet, A., see Domenichini, B. 244 (2005) 403
Brillson, L.J., S.T. Bradley, S.H. Tumakha, S.H. Goss, X.L. Sun, R.S. Okojie, J. Hwang and W.J. Schaff, Local electronic and chemical structure at GaN, AlGaN and SiC heterointerfaces 244 (2005) 257
Budde, F., see Metson, J.B. 244 (2005) 264
Cao, L.L., see Shimomura, M. 244 (2005) 153
Chen, C.-C., see Huang, H.-H. 244 (2005) 252
Chen, L.J., see Hsin, C.L. 244 (2005) 101
Chen, L.J., see Lu, M.Y. 244 (2005) 96
Chen, L.J., see Tsai, W.C. 244 (2005) 115
Chen, Z.Q., S. Yamamoto, A. Kawasuso, Y. Xu and T. Sekiguchi, Characterization of homoepitaxial and heteroepitaxial ZnO films grown by pulsed laser deposition 244 (2005) 377
Chen, Z.Q., see Maekawa, M. 244 (2005) 322
Chiba, S., see Murai, H. 244 (2005) 351
Cho, N.-H., see Park, M.-B. 244 (2005) 418
Cho, N.-H., see Park, M.-B. 244 (2005) 422
Choi, H.-J., J.-K. Yang, S. Yoon and H.-H. Park, Changes in the electronic energy structure of CdSe nanocrystals of close-packed array by in situ anneal 244 (2005) 92
Choi, J.-M. and S. Im, Ultraviolet enhanced Si-photodetector using p-NiO films 244 (2005) 435
Choi, J.-M., see Park, S.-W. 244 (2005) 439
Chou, L.J., see Lu, M.Y. 244 (2005) 96
Chueh, Y.L., see Lu, M.Y. 244 (2005) 96
Cullis, A.G., D.J. Norris, M.A. Migliorato and M. Hopkinson, Surface elemental segregation and the Stranski–Krastanow epitaxial islanding transition 244 (2005) 65
Dadi, A., see Jayatissa, A.H. 244 (2005) 453
Dahoo, P.R., see Franta, D. 244 (2005) 426
Dai, N., see Franta, D. 244 (2005) 338
Dai, N., see Gao, Y.Z. 244 (2005) 297

doi:10.1016/S0169-4332(05)00453-8

Dai, N., see Mistrik, J. 244 (2005) 431
Deki, H., see Makihara, K. 244 (2005) 75
Deng, H.Y., see Gao, Y.Z. 244 (2005) 297
Doi, Y., see Kobayashi, K. 244 (2005) 389
Domenichini, B., P. Krüger, A. Brevet, S. Bourgeois, Z. Li and P.J. Møller, Reactivity between molybdenum and TiO_2(1 1 0) surfaces: evidence of a sub-monolayer mode and a multilayer mode 244 (2005) 403
Domenichini, B., see Bourgeois, S. 244 (2005) 399
Duh, J.G., see Li, C.Y. 244 (2005) 477

Edamoto, K., Y. Shirotori, T. Sato and K. Ozawa, Photoemission spectroscopy study of the oxidation of HfC(1 0 0) 244 (2005) 174
Ehara, M., see Hakamata, S. 244 (2005) 469
Elanany, M., see Masuda, T. 244 (2005) 30
Elschner, A., see Koch, N. 244 (2005) 593
Emoto, T., K. Akimoto, Y. Yoshida, A. Ichimiya, T. Nabatame and A. Toriumi, Strain relaxation near high-k/Si interface by post-deposition annealing 244 (2005) 55
Enomoto, Y. and M. Taguchi, Modelling of columnar growth in continuum ballistic deposition 244 (2005) 213

Fang, W.Z., see Gao, Y.Z. 244 (2005) 297
Fazzio, A., see Miwa, R.H. 244 (2005) 124
Fengmin, C., see Takagi, N. 244 (2005) 330
Fons, P., see Iwata, K. 244 (2005) 504
Franta, D., B. Negulescu, L. Thomas, P.R. Dahoo, M. Guyot, I. Ohlídal, J. Mistrík and T. Yamaguchi, Optical properties of NiO thin films prepared by pulsed laser deposition technique 244 (2005) 426
Franta, D., I. Ohlídal, J. Mistrík, T. Yamaguchi, G.J. Hu and N. Dai, Optical characterization of sol–gel deposited PZT thin films by spectroscopic ellipsometry and reflectometry in near-UV and visible regions 244 (2005) 338
Franta, D., see Antos, R. 244 (2005) 221
Franta, D., see Mistrik, J. 244 (2005) 431
Fujii, M., see Toyama, T. 244 (2005) 524
Fujii, Y., E. Yanase and K. Arai, Depth profiling of the strain distribution in the surface layer using X-ray diffraction at small glancing angle of incidence 244 (2005) 230
Fujinami, T., see Isobe, H. 244 (2005) 199
Fujioka, H., see Naono, T. 244 (2005) 277
Fujiyasu, H., see Sakakibara, S. 244 (2005) 343
Fukano, T., see Takeda, Y. 244 (2005) 209
Fukaya, Y., A. Kawasuso, K. Hayashi and A. Ichimiya, Observation of Si(1 1 1)-$\sqrt{3} \times \sqrt{3}$-Ag surface at room temperature by reflection high-energy positron diffraction 244 (2005) 166
Fukaya, Y., see Hayashi, K. 244 (2005) 145
Fuke, S., see Sumiya, M. 244 (2005) 269
Fukuda, Y., see Medvid, A. 244 (2005) 120
Fukuda, Y., see Shimomura, M. 244 (2005) 153
Fukuda, Y., see Temmyo, J. 244 (2005) 1
Fukushi, Y., H. Kominami, Y. Nakanishi and Y. Hatanaka, Effect of ITO surface state to the aging characteristics of thin film OLED 244 (2005) 537

Gao, Y.Z., X.Y. Gong, W.Z. Fang, H.Y. Deng, G.J. Hu, M. Aoyama, T. Yamaguchi and N. Dai, Influence of Si_3N_4 and ZnS films on transmittance of InAsSb/InAsPSb heterostructures 244 (2005) 297
Gnatyuk, V.A., T. Aoki, Y. Hatanaka and O.I. Vlasenko, Metal–semiconductor interfaces in CdTe crystals and modification of their properties by laser pulses 244 (2005) 528
Gong, X.Y., see Gao, Y.Z. 244 (2005) 297
Goss, S.H., see Brillson, L.J. 244 (2005) 257
Goto, M., see Pihosh, Y. 244 (2005) 244
Graugnard, E., see King, J.S. 244 (2005) 511
Guyot, M., see Franta, D. 244 (2005) 426

Hakamata, S., M. Ehara, H. Kominami, Y. Nakanishi and Y. Hatanaka, Preparation of CaS:Cu,F thin-film electroluminescent devices with an emission including purple region 244 (2005) 469
Hamada, M., see Yamamoto, M. 244 (2005) 310
Hamamatsu, H., see Naono, T. 244 (2005) 277
Han, C.-K., see Jung, S.-B. 244 (2005) 47
Hara, M., see Ito, E. 244 (2005) 584
Harada, Y., see Sato, N. 244 (2005) 588
Hasegawa, H., see Matsuo, K. 244 (2005) 273
Hasegawa, H., see Oikawa, T. 244 (2005) 84
Hasegawa, H., see Shiozaki, N. 244 (2005) 71
Hasegawa, Y., see Tomita, Y. 244 (2005) 107
Hashimoto, H., T. Teraji and T. Ito, Impact ionization phenomenon in single-crystalline rutile TiO_2 244 (2005) 394
Hashizume, T., see Matsuo, K. 244 (2005) 273
Hashizume, T., see Oikawa, T. 244 (2005) 84
Hashizume, T., see Shiozaki, N. 244 (2005) 71
Hatanaka, Y., see Arai, Y. 244 (2005) 473
Hatanaka, Y., see Fukushi, Y. 244 (2005) 537
Hatanaka, Y., see Gnatyuk, V.A. 244 (2005) 528
Hatanaka, Y., see Hakamata, S. 244 (2005) 469
Hatanaka, Y., see Nakanishi, Y. 244 (2005) 359
Hatanaka, Y., see Ohara, K. 244 (2005) 369
Hatanaka, Y., see Sirghi, L. 244 (2005) 408
Hatanaka, Y., H. Naito, S. Itou and M. Kando, Photocatalytic characteristics of hydro-oxygenated amorphous titanium oxide films prepared using remote plasma enhanced chemical vapor deposition 244 (2005) 554
Hayashi, K., see Fukaya, Y. 244 (2005) 166
Hayashi, K., Y. Fukaya, A. Kawasuso and A. Ichimiya, Reflection high-energy positron diffraction study of a Si(0 0 1) surface 244 (2005) 145
Haze, H., see Toyama, T. 244 (2005) 524
He, J.H., see Hsin, C.L. 244 (2005) 101
He, J.-L., see Huang, H.-H. 244 (2005) 252
Heineman, D., see King, J.S. 244 (2005) 511
Henrion, W., see Tanaka, S. 244 (2005) 326

Higashi, S., see Kaku, H. 244 (2005) 8
Higashi, S., see Kosku, N. 244 (2005) 39
Higashi, S., see Makihara, K. 244 (2005) 75
Higashi, S., see Okamoto, Y. 244 (2005) 12
Hirashima, N., see Mathew, J.C. 244 (2005) 603
Hiratsuka, A., see Matsushima, T. 244 (2005) 141
Hopkinson, M., see Cullis, A.G. 244 (2005) 65
Horie, M., see Antos, R. 244 (2005) 225
Horino, H., see Matsushima, T. 244 (2005) 141
Hosoi, Y., K. Okamura, Y. Kimura, H. Ishii and M. Niwano, Infrared spectroscopy of pentacene thin film on SiO_2 surface 244 (2005) 607
Hozumi, A. and N. Shirahata, Chemical properties of an oxide nanoskin on a polymeric surface 244 (2005) 334
Hsin, C.L., J.H. He and L.J. Chen, Growth of In_2O_3 nanocrystal chains by a vapor transport and condensation method 244 (2005) 101
Hsu, C.-H., see Huang, H.-H. 244 (2005) 252
Hsu, H.C., see Tsai, W.C. 244 (2005) 115
Hsu, H.F., see Tsai, W.C. 244 (2005) 115
Hu, G.J., see Franta, D. 244 (2005) 338
Hu, G.J., see Gao, Y.Z. 244 (2005) 297
Hu, G.J., see Mistrik, J. 244 (2005) 431
Huang, H.-H., C.-H. Hsu, S.-J. Pan, J.-L. He, C.-C. Chen and T.-L. Lee, Corrosion and cell adhesion behavior of TiN-coated and ion-nitrided titanium for dental applications 244 (2005) 252
Hwang, D.K., K. Kim, J.H. Kim, D.-Y. Jung, E. Kim and S. Im, Structural and optical properties of 6,13-pentacenequinone film 244 (2005) 615
Hwang, J., see Brillson, L.J. 244 (2005) 257

Ichimiya, A., see Emoto, T. 244 (2005) 55
Ichimiya, A., see Fukaya, Y. 244 (2005) 166
Ichimiya, A., see Hayashi, K. 244 (2005) 145
Ichimiya, A., see Kawasuso, A. 244 (2005) 149
Ichimiya, A., see Terasawa, N. 244 (2005) 16
Iizuka, M., see Mathew, J.C. 244 (2005) 603
Ikuta, R., see Kinoshita, H. 244 (2005) 314
Im, S., see Choi, J.-M. 244 (2005) 435
Im, S., see Hwang, D.K. 244 (2005) 615
Im, S., see Park, S.-W. 244 (2005) 439
Im, S., see Yoon, M.H. 244 (2005) 444
Imai, Y., see Maeda, M. 244 (2005) 61
Imamura, A., see Jung, C. 244 (2005) 644
Imamura, K., see Matsushima, T. 244 (2005) 141
Inoue, Y., see Sakakibara, S. 244 (2005) 343
Inoue, Y., see Teshima, K. 244 (2005) 619
Ishida, A., see Sakakibara, S. 244 (2005) 343
Ishihara, J., A. Nakamura, S. Shigemori, T. Aoki and J. Temmyo, Growth and characterization of $Zn_{1-x}Cd_xO$ films using remote plasma MOCVD 244 (2005) 381
Ishihara, J., see Nakamura, A. 244 (2005) 385
Ishii, H., see Hosoi, Y. 244 (2005) 607
Ishikawa, F., see Oikawa, T. 244 (2005) 84
Ishikawa, Y., see Maeda, M. 244 (2005) 61
Ishino, K., see Sakakibara, S. 244 (2005) 343
Ishizaki, H., T. Akiyama, K. Nakamura, K. Shiraishi, A. Taguchi and T. Ito, Theoretical investigation of phase transition on GaAs(0 0 1)-c(4 × 4) surface 244 (2005) 186
Ishizuka, S., see Iwata, K. 244 (2005) 504
Isobe, H., C.D. Singh, H. Katsumata, H. Suzuki, T. Fujinami and M. Ogita, Measurements of critical micelle concentration (CMC) using optical fiber covered with porous sol–gel cladding 244 (2005) 199
Isobe, T., see Kubo, H. 244 (2005) 465
Ito, E., K. Konno, J. Noh, K. Kanai, Y. Ouchi, K. Seki and M. Hara, Chain length dependence of adsorption structure of COOH-terminated alkanethiol SAMs on Au(1 1 1) 244 (2005) 584
Ito, T., K. Asano, T. Akiyama, K. Nakamura, K. Shiraishi and A. Taguchi, An ab initio-based approach to Ga adatom migration on GaAs(n 1 1)A–(0 0 1) non-planar surfaces 244 (2005) 178
Ito, T., see Hashimoto, H. 244 (2005) 394
Ito, T., see Ishizaki, H. 244 (2005) 186
Ito, T., see Kawamoto, K. 244 (2005) 182
Ito, T., see Nakamura, J. 244 (2005) 301
Ito, T., see Takeda, Y. 244 (2005) 485
Ito, T., see Wada, H. 244 (2005) 305
Ito, T., see Yamamoto, M. 244 (2005) 310
Ito, T., T. Suda, T. Akiyama and K. Nakamura, An empirical potential approach to structural stability of GaN_xAs_{1-x} thin films on GaAs(1 1 1) 244 (2005) 170
Itoh, S., see Kubo, H. 244 (2005) 465
Itoh, T., S. Kashirajima, M. Naitoh, S. Nishigaki and F. Shoji, STM observation of Bi line structures on the Si(1 0 0) surface with Ag deposition 244 (2005) 161
Itou, S., see Hatanaka, Y. 244 (2005) 554
Iwata, K., H. Tampo, A. Yamada, P. Fons, K. Matsubara, K. Sakurai, S. Ishizuka and S. Niki, Growth of ZnO and device applications 244 (2005) 504

Jayatissa, A.H., A. Dadi and T. Aoki, Nanocrystalline WO_3 films prepared by two-step annealing 244 (2005) 453
Jin, P., see Xu, G. 244 (2005) 449
Johnson, R.L., see Koch, N. 244 (2005) 593
Jung, C., M. Koyama, M. Kubo, A. Imamura and A. Miyamoto, Periodic density functional and tight-binding quantum chemical molecular dynamics study of surface hydroxyl groups on ZrO_2(111)-supported Pt catalyst 244 (2005) 644
Jung, C., see Mart, U. 244 (2005) 640
Jung, D.-Y., see Hwang, D.K. 244 (2005) 615
Jung, S.-B., C.-K. Han and H.-H. Park, Electrical and mechanical properties of surfactant-templated mesoporous silica thin films using Brij-76 surfactant 244 (2005) 47

Kaku, H., S. Higashi, H. Taniguchi, H. Murakami and S. Miyazaki, A new crystallization technique of Si films on glass substrate using thermal plasma jet 244 (2005) 8
Kanai, K., see Ito, E. 244 (2005) 584
Kanai, K., see Okabayashi, Y. 244 (2005) 217
Kanda, R., see Sato, N. 244 (2005) 588
Kando, M., see Hatanaka, Y. 244 (2005) 554
Kaneko, K., see Miao, L. 244 (2005) 412
Kanki, T., see Vilquin, B. 244 (2005) 494
Kanki, T., see Yanagida, T. 244 (2005) 355
Kanki, T., T. Yanagida, B. Vilquin, H. Tanaka and T. Kawai, Investigation on transport properties of strained $La_{0.85}Ba_{0.15}MnO_3$ thin films using hall measurement 244 (2005) 481
Kasahara, A., see Pihosh, Y. 244 (2005) 244
Kashirajima, S., see Itoh, T. 244 (2005) 161
Kashiwaba, Y., H. Kato, T. Kikuchi, I. Niikura, K. Matsushita and Y. Kashiwaba, Homoepitaxial growth of ZnO films on ZnO (1 1 2 0) substrates 244 (2005) 373
Kashiwaba, Y., see Kashiwaba, Y. Kashiwaba, Y., see Kashiwaba, Y. 244 (2005) 373
Kashiwaba, Y., see Murai, H. 244 (2005) 351
Kato, H., see Kashiwaba, Y. 244 (2005) 373
Kato, N., I. Konomi, Y. Seno and T. Motohiro, In situ X-ray diffraction study of crystallization process of GeSbTe thin films during heat treatment 244 (2005) 281
Katsumata, H., see Isobe, H. 244 (2005) 199
Kawai, T., see Kanki, T. 244 (2005) 481
Kawai, T., see Vilquin, B. 244 (2005) 494
Kawai, T., see Yanagida, T. 244 (2005) 355
Kawamoto, K., T. Suda, T. Akiyama, K. Nakamura and T. Ito, An empirical potential approach to dislocation formation and structural stability in GaN_xAs_{1-x} 244 (2005) 182
Kawashima, Y., S. Aoyagi and M. Kudo, Thermal redistribution of hydrogen and boron in SiO_2 in SiN-capped p-type MOSFET structures 244 (2005) 43
Kawasuso, A., M. Maekawa, M. Yoshikawa and A. Ichimiya, Positron diffraction study of SiC(0 0 0 1) surface 244 (2005) 149
Kawasuso, A., see Chen, Z.Q. 244 (2005) 377
Kawasuso, A., see Fukaya, Y. 244 (2005) 166
Kawasuso, A., see Hayashi, K. 244 (2005) 145
Kawasuso, A., see Maekawa, M. 244 (2005) 322
Kawata, H., see Terasawa, N. 244 (2005) 16
Kikuchi, T., see Kashiwaba, Y. 244 (2005) 373
Kim, E., see Hwang, D.K. 244 (2005) 615
Kim, E., see Park, S.-W. 244 (2005) 439
Kim, J.H., see Hwang, D.K. 244 (2005) 615
Kim, K., see Hwang, D.K. 244 (2005) 615
Kim, Y.B., see Lee, J.J. 244 (2005) 365
Kimura, Y., see Hosoi, Y. 244 (2005) 607
King, J.S., D. Heineman, E. Graugnard and C.J. Summers, Atomic layer deposition in porous structures: 3D photonic crystals 244 (2005) 511
Kinoshita, H., R. Ikuta and K. Sakurai, Formation of wide and narrow optical-band-gap amorphous-CN_x:H films using i-C_4H_{10}/N_2 supermagnetron plasma 244 (2005) 314
Kishimoto, N., see Plaksin, O.A. 244 (2005) 79
Klapetek, P., see Antos, R. 244 (2005) 221
Kobayashi, K., see Tomita, Y. 244 (2005) 107
Kobayashi, K., Y. Tomita, K. Matsuhisa and Y. Doi, Nano-photocatalytic decomposition of a stearic acid film deposited on the TiO_2 by an atomic force microscope 244 (2005) 389
Kobayashi, Y. and K. Yamaguchi, Control of photoluminescence wavelength from uniform InAs quantum dots by annealing 244 (2005) 88
Koch, N., A. Elschner, R.L. Johnson and J.P. Rabe, Energy level alignment at interfaces with pentacene: metals versus conducting polymers 244 (2005) 593
Kodama, H., see Oyaidzu, M. 244 (2005) 240
Koide, Y., Enhancement of donor ionization in phosphorus-doped n-diamond 244 (2005) 26
Kojima, I., see Tan, R. 244 (2005) 21
Komarov, E.V., see Sychov, M.M. 244 (2005) 461
Kominami, H., see Arai, Y. 244 (2005) 473
Kominami, H., see Fukushi, Y. 244 (2005) 537
Kominami, H., see Hakamata, S. 244 (2005) 469
Kominami, H., see Nakanishi, Y. 244 (2005) 359
Kominami, H., see Ohara, K. 244 (2005) 369
Kominami, H., see Sakuma, S. 244 (2005) 458
Komiyama, M. and Y.-J. Li, Photoresponse of surface oxygen defects on TiO_2(1 1 0) 244 (2005) 550
Komolov, A. and P.J. Møller, Unoccupied electronic band structure of conjugated molecular films interfacing polycrystalline gold surface 244 (2005) 573
Konno, K., see Ito, E. 244 (2005) 584
Kono, K., see Plaksin, O.A. 244 (2005) 79
Konomi, I., see Kato, N. 244 (2005) 281
Korsakov, V.G., see Sychov, M.M. 244 (2005) 461
Kosku, N., H. Murakami, S. Higashi and S. Miyazaki, Influence of substrate dc bias on crystallinity of silicon films grown at a high rate from inductively-coupled plasma CVD 244 (2005) 39
Kotani, J., see Matsuo, K. 244 (2005) 273
Koyama, M., M. Kubo and A. Miyamoto, Large-scale calculations of solid oxide fuel cell cermet anode by tight-binding quantum chemistry method 244 (2005) 598
Koyama, M., see Agalya, G. 244 (2005) 195
Koyama, M., see Jung, C. 244 (2005) 644
Koyama, M., see Kurokawa, H. 244 (2005) 636
Koyama, M., see Lv, C. 244 (2005) 541
Koyama, M., see Mart, U. 244 (2005) 640
Koyama, M., see Masuda, T. 244 (2005) 30
Koyama, M., see Raharintsalama, R. 244 (2005) 631
Koyama, M., see Rajendran, A. 244 (2005) 34
Krüger, P., see Domenichini, B. 244 (2005) 403
Krivich, A., see Medvid', A. 244 (2005) 203

Kubo, H., T. Isobe, H. Takahashi and S. Itoh, Characterization on thermal stability of ZnS:Mn^{2+}/MPS/SiO_2 nano-phosphor film 244 (2005) 465
Kubo, M., see Agalya, G. 244 (2005) 195
Kubo, M., see Jung, C. 244 (2005) 644
Kubo, M., see Koyama, M. 244 (2005) 598
Kubo, M., see Kurokawa, H. 244 (2005) 636
Kubo, M., see Lv, C. 244 (2005) 541
Kubo, M., see Mart, U. 244 (2005) 640
Kubo, M., see Masuda, T. 244 (2005) 30
Kubo, M., see Raharintsalama, R. 244 (2005) 631
Kubo, M., see Rajendran, A. 244 (2005) 34
Kubo, T., see Tsukamoto, K. 244 (2005) 578
Kudo, K., see Mathew, J.C. 244 (2005) 603
Kudo, M., see Kawashima, Y. 244 (2005) 43
Kuramochi, H., see Sun, Z.G. 244 (2005) 489
Kurita, S., see Nagatsu, M. 244 (2005) 111
Kurokawa, H., K. Bada, M. Koyama, M. Kubo and A. Miyamoto, Development of new kinetic Monte Carlo simulator for hydrogen diffusion process in palladium–silver alloys 244 (2005) 636
Kusama, H., see Yasuda, K. 244 (2005) 347
Kuwabara, H., see Nakanishi, Y. 244 (2005) 359
Kuwabara, H., see Takagi, N. 244 (2005) 330
Kuwabara, H., see Tanaka, S. 244 (2005) 326

Lee, J.J., Y.B. Kim and Y.S. Yoon, Deposition and structural properties of piezoelectric ZnO epitaxial film on p-InP (1 0 0) substrate for FBAR 244 (2005) 365
Lee, J.-W., Microstructures and mechanical properties evaluation of hard chromized austenitic Fe–Mn–Al alloys 244 (2005) 248
Lee, T.-L., see Huang, H.-H. 244 (2005) 252
Li, C.Y. and J.G. Duh, Magnetic properties of $Fe_{70-x}Co_{30-y}N_{x+y}$ thin films 244 (2005) 477
Li, Y.-J., see Komiyama, M. 244 (2005) 550
Li, Z., see Bourgeois, S. 244 (2005) 399
Li, Z., see Domenichini, B. 244 (2005) 403
Liu, Z.-Q., see Tanaka, S. 244 (2005) 326
Lu, M.Y., P.Y. Su, Y.L. Chueh, L.J. Chen and L.J. Chou, Growth of ZnS nanocombs with ZnO sheath by thermal evaporation 244 (2005) 96
Lv, C., see Agalya, G. 244 (2005) 195
Lv, C., X. Wang, G. Agalya, M. Koyama, M. Kubo and A. Miyamoto, Photocatalytic oxidation dynamics of acetone on TiO_2: tight-binding quantum chemical molecular dynamics study 244 (2005) 541

Ma, Y.-S., I.I. Rzeznicka and T. Matsushima, Separation of nitrogen removal pathways in a steady-state NO + CO reaction on Pd(1 1 0): an angle-resolved desorption study 244 (2005) 558
Ma, Y.-S., see Matsushima, T. 244 (2005) 141
MacLeod, J.M., see Miwa, R.H. 244 (2005) 157
Maeda, M., T. Watanabe, Y. Imai, Y. Ishikawa and M. Tabe, Diffusion of Li in the silicon oxide films and evaluation of Li-induced surface potential 244 (2005) 61
Maekawa, M., A. Kawasuso, Z.Q. Chen, M. Yoshikawa, R. Suzuki and T. Ohdaira, Structural defects in SiO_2/SiC interface probed by a slow positron beam 244 (2005) 322
Maekawa, M., see Kawasuso, A. 244 (2005) 149
Makihara, K., H. Deki, H. Murakami, S. Higashi and S. Miyazaki, Control of the nucleation density of Si quantum dots by remote hydrogen plasma treatment 244 (2005) 75
Makihara, K., see Okamoto, Y. 244 (2005) 12
Makiuchi, S., see Tanaka, S. 244 (2005) 326
Malins, A.E.R., see Nakamura, T. 244 (2005) 318
Mart, U., C. Jung, M. Koyama, M. Kubo and A. Miyamoto, Computational chemistry study of solid and aqueous solution interface 244 (2005) 640
Masuda, T., K. Sasata, M. Elanany, M. Koyama, M. Kubo and A. Miyamoto, Tight-binding quantum chemical molecular dynamics simulation of boron activation process in crystalline silicon 244 (2005) 30
Mathew, J.C., N. Hirashima, M. Nakamura, M. Iizuka and K. Kudo, Fabrication of organic static induction transistors with higher order structures 244 (2005) 603
Matsubara, K., see Iwata, K. 244 (2005) 504
Matsuda, J., see Murai, H. 244 (2005) 351
Matsuhisa, K., see Kobayashi, K. 244 (2005) 389
Matsumoto, T., see Mimura, H. 244 (2005) 498
Matsuo, K., N. Negoro, J. Kotani, T. Hashizume and H. Hasegawa, Pt Schottky diode gas sensors formed on GaN and AlGaN/GaN heterostructure 244 (2005) 273
Matsushima, T., K. Imamura, H. Horino, A. Hiratsuka, Y.-S. Ma, I.I. Rzeznicka and O. Nakagoe, Inclined N_2 desorption in N_2O decomposition on Rh(1 1 0) 244 (2005) 141
Matsushima, T., see Ma, Y.-S. 244 (2005) 558
Matsushita, K., see Kashiwaba, Y. 244 (2005) 373
Matsuyama, R., see Okabayashi, Y. 244 (2005) 217
Matsuyama, T., see Takagi, N. 244 (2005) 330
Matsuyama, T., see Tanaka, S. 244 (2005) 326
McLean, A.B., see Miwa, R.H. 244 (2005) 157
Medvid', A., A. Mychko, A. Krivich and P. Onufrijevs, Formation of pores in Ge single crystal by laser radiation 244 (2005) 203
Medvid, A., Y. Fukuda, A. Michko, P. Onufrievs and Y. Anma, 2D lattice formation by YAG:Nd laser on the surface of Ge single crystal 244 (2005) 120
Metson, J.B., B.J. Ruck, F. Budde, H.J. Trodahl, A. Bittar and K.E. Prince, Characterisation of amorphous GaN films 244 (2005) 264
Miao, L., S. Tanemura, H. Watanabe, S. Toh and K. Kaneko, Structural and compositional characterization of N_2–H_2 plasma surface-treated TiO_2 thin films 244 (2005) 412
Miao, L., see Tanemura, S. 244 (2005) 546
Michko, A., see Medvid, A. 244 (2005) 120
Migliorato, M.A., see Cullis, A.G. 244 (2005) 65

Mikami, A., see Tokunaga, S. 244 (2005) 533
Mimura, H., see Sakakibara, S. 244 (2005) 343
Mimura, H., see Sakuma, S. 244 (2005) 458
Mimura, H., Y. Neo, H. Shimawaki, T. Matsumoto and K. Yokoo, Emission characteristics and application of semiconductor field emitters 244 (2005) 498
Minami, T., see Miyata, T. 244 (2005) 563
Minami, T., see Tanaka, H. 244 (2005) 568
Mistrik, J., I. Ohlidal, R. Antos, M. Aoyama and T. Yamaguchi, Evidence of refractive index change in glass substrates induced by high-density reactive ion plating deposition of SiO_2 films 244 (2005) 51
Mistrik, J., see Antos, R. 244 (2005) 221
Mistrik, J., see Antos, R. 244 (2005) 225
Mistrik, J., T. Yamaguchi, D. Franta, I. Ohlidal, G.J. Hu and N. Dai, Optical properties of rough $LaNiO_3$ thin films studied by spectroscopic ellipsometry and reflectometry 244 (2005) 431
Mistrík, J., see Franta, D. 244 (2005) 338
Mistrík, J., see Franta, D. 244 (2005) 426
Mitarai, T., see Okabayashi, Y. 244 (2005) 217
Miwa, R.H., J.M. MacLeod, G.P. Srivastava and A.B. McLean, The geometry of Bi nanolines on Si(0 0 1) 244 (2005) 157
Miwa, R.H., W. Orellana and A. Fazzio, Carbon nanotube adsorbed on hydrogenated Si(0 0 1) surfaces 244 (2005) 124
Miyake, A., see Nakanishi, Y. 244 (2005) 359
Miyamoto, A., see Agalya, G. 244 (2005) 195
Miyamoto, A., see Jung, C. 244 (2005) 644
Miyamoto, A., see Koyama, M. 244 (2005) 598
Miyamoto, A., see Kurokawa, H. 244 (2005) 636
Miyamoto, A., see Lv, C. 244 (2005) 541
Miyamoto, A., see Mart, U. 244 (2005) 640
Miyamoto, A., see Masuda, T. 244 (2005) 30
Miyamoto, A., see Raharintsalama, R. 244 (2005) 631
Miyamoto, A., see Rajendran, A. 244 (2005) 34
Miyata, T. and T. Minami, Chlorine gas sensors with high sensitivity using Mg-phthalocyanine thin films 244 (2005) 563
Miyata, T., see Tanaka, H. 244 (2005) 568
Miyazaki, S., see Kaku, H. 244 (2005) 8
Miyazaki, S., see Kosku, N. 244 (2005) 39
Miyazaki, S., see Makihara, K. 244 (2005) 75
Miyazaki, S., see Okamoto, Y. 244 (2005) 12
Mizuno, Y., see Terasawa, N. 244 (2005) 16
Mjakin, S.V., see Sychov, M.M. 244 (2005) 461
Møller, P.J., see Bourgeois, S. 244 (2005) 399
Møller, P.J., see Domenichini, B. 244 (2005) 403
Møller, P.J., see Komolov, A. 244 (2005) 573
Mori, M., see Saito, M. 244 (2005) 137
Mori, Y., see Tanemura, S. 244 (2005) 546
Motohiro, T., see Kato, N. 244 (2005) 281
Motohiro, T., see Takeda, Y. 244 (2005) 209
Munakata, H., see Raharintsalama, R. 244 (2005) 631
Murai, H., T. Abe, J. Matsuda, H. Sato, S. Chiba and Y. Kashiwaba, Improvement in the light emission characteristics of CdS:Cu/CdS diodes 244 (2005) 351
Murakami, H., see Kaku, H. 244 (2005) 8
Murakami, H., see Kosku, N. 244 (2005) 39
Murakami, H., see Makihara, K. 244 (2005) 75
Murakami, K., see Antos, R. 244 (2005) 225
Murakami, K., see Nagatsu, M. 244 (2005) 111
Mychko, A., see Medvid', A. 244 (2005) 203

Nabatame, T., see Emoto, T. 244 (2005) 55
Nabatame, T., see Terasawa, N. 244 (2005) 16
Nagare, S., see Sagawa, J. 244 (2005) 611
Nagare, S., see Taketani, I. 244 (2005) 623
Nagatsu, M., T. Yoshida, S. Kurita and K. Murakami, Characterization of amorphous carbon film-coated nanotubes as electron field emission material 244 (2005) 111
Naito, H., see Hatanaka, Y. 244 (2005) 554
Naitoh, M., see Itoh, T. 244 (2005) 161
Nakagoe, O., see Matsushima, T. 244 (2005) 141
Nakamura, A., J. Ishihara, S. Shigemori, T. Aoki and J. Temmyo, Growth of $Mg_xZn_{1-x}O$ films using remote plasma MOCVD 244 (2005) 385
Nakamura, A., see Ishihara, J. 244 (2005) 381
Nakamura, A., see Ohara, K. 244 (2005) 369
Nakamura, J. and T. Ito, Oxidization process of CVD diamond (1 0 0):H 2×1 surfaces 244 (2005) 301
Nakamura, K., see Ishizaki, H. 244 (2005) 186
Nakamura, K., see Ito, T. 244 (2005) 170
Nakamura, K., see Ito, T. 244 (2005) 178
Nakamura, K., see Kawamoto, K. 244 (2005) 182
Nakamura, K., see Takeda, Y. 244 (2005) 485
Nakamura, M., see Mathew, J.C. 244 (2005) 603
Nakamura, T., N. Takahashi, N.R.J. Poolton and A.E.R. Malins, Optical and structural properties of CVD-grown single crystal SiO_2 using optically detected XAS 244 (2005) 318
Nakamura, Y., see Takahashi, N. 244 (2005) 190
Nakanishi, Y., A. Miyake, H. Tatsuoka, H. Kominami, H. Kuwabara and Y. Hatanaka, HRTEM observation of interface states between ZnO epitaxial film and Si(1 1 1) substrate 244 (2005) 359
Nakanishi, Y., see Arai, Y. 244 (2005) 473
Nakanishi, Y., see Fukushi, Y. 244 (2005) 537
Nakanishi, Y., see Hakamata, S. 244 (2005) 469
Nakanishi, Y., see Ohara, K. 244 (2005) 369
Nakanishi, Y., see Sakuma, S. 244 (2005) 458
Nakanishi, Y., see Sychov, M.M. 244 (2005) 461
Nakanishi, Y., see Temmyo, J. 244 (2005) 1
Nakayama, S., see Taketani, I. 244 (2005) 623
Nakayama, T., see Oda, M. 244 (2005) 627
Naono, T., J. Okabayashi, S. Toyoda, H. Fujioka, M. Oshima and H. Hamamatsu, Photoemission study on interfacial reaction of Ti/n-type GaN 244 (2005) 277
Nara, J., see Takahashi, N. 244 (2005) 190
Negoro, N., see Matsuo, K. 244 (2005) 273
Negulescu, B., see Franta, D. 244 (2005) 426
Neo, Y., see Mimura, H. 244 (2005) 498
Neo, Y., see Sakuma, S. 244 (2005) 458

Neyts, K., Microcavity effects and the outcoupling of light in displays and lighting applications based on thin emitting films 244 (2005) 517
Niikura, I., see Kashiwaba, Y. 244 (2005) 373
Niki, S., see Iwata, K. 244 (2005) 504
Niraula, M., see Yasuda, K. 244 (2005) 347
Nishigaki, S., see Itoh, T. 244 (2005) 161
Niwano, M., see Hosoi, Y. 244 (2005) 607
Noda, N., see Oyaidzu, M. 244 (2005) 240
Noh, J., see Ito, E. 244 (2005) 584
Norris, D.J., see Cullis, A.G. 244 (2005) 65
Nozoye, H., see Tsukamoto, K. 244 (2005) 578

Oda, M. and T. Nakayama, Electronic-state control of amino acids on semiconductor surfaces 244 (2005) 627
Odawara, M., see Udagawa, T. 244 (2005) 285
Odawara, M., T. Udagawa and G. Shimaoka, Morphological investigation of double positioning growth of (1 1 1)-boron phosphide (BP) on the (0 0 0 1)-GaN 244 (2005) 289
Ogita, M., see Isobe, H. 244 (2005) 199
Ohara, K., T. Seino, A. Nakamura, T. Aoki, H. Kominami, Y. Nakanishi and Y. Hatanaka, Sb excimer-laser doping in ZnO films prepared by oxidation of sulfide on Si 244 (2005) 369
Ohdaira, T., see Maekawa, M. 244 (2005) 322
Ohlídal, I., see Franta, D. 244 (2005) 338
Ohlídal, I., see Franta, D. 244 (2005) 426
Ohlidal, I., see Antos, R. 244 (2005) 221
Ohlidal, I., see Antos, R. 244 (2005) 225
Ohlidal, I., see Mistrik, J. 244 (2005) 51
Ohlidal, I., see Mistrik, J. 244 (2005) 431
Ohno, T., see Takahashi, N. 244 (2005) 190
Oikawa, T., F. Ishikawa, T. Sato, T. Hashizume and H. Hasegawa, Study on ECR dry etching and selective MBE growth of AlGaN/GaN for fabrication of quantum nanostructures on GaN (0 0 0 1) substrates 244 (2005) 84
Oishi, T., see Pihosh, Y. 244 (2005) 244
Okabayashi, J., see Naono, T. 244 (2005) 277
Okabayashi, Y., T. Mitarai, S. Yamazaki, R. Matsuyama, K. Kanai, Y. Ouchi and K. Seki, Preparation and characterization of Rhodamine B and Alq_3 thin films deposited by solution jet beam method 244 (2005) 217
Okamoto, H., see Toyama, T. 244 (2005) 524
Okamoto, Y., K. Makihara, S. Higashi and S. Miyazaki, Formation of microcrystalline germanium (μc-Ge:H) films from inductively coupled plasma CVD 244 (2005) 12
Okamura, K., see Hosoi, Y. 244 (2005) 607
Okojie, R.S., see Brillson, L.J. 244 (2005) 257
Okuno, K., see Oyaidzu, M. 244 (2005) 240
Onufrievs, P., see Medvid, A. 244 (2005) 120
Onufrijevs, P., see Medvid', A. 244 (2005) 203
Orellana, W., see Miwa, R.H. 244 (2005) 124
Oshima, M., see Naono, T. 244 (2005) 277
Ouchi, Y., see Ito, E. 244 (2005) 584
Ouchi, Y., see Okabayashi, Y. 244 (2005) 217
Oya, Y., see Oyaidzu, M. 244 (2005) 240
Oyaidzu, M., A. Yoshikawa, H. Kodama, Y. Oya, A. Sagara, N. Noda and K. Okuno, Preparation of pure boron coating film and its characterization by XPS and TDS 244 (2005) 240
Ozawa, K., see Edamoto, K. 244 (2005) 174

Pan, S.-J., see Huang, H.-H. 244 (2005) 252
Park, H.-H., see Choi, H.-J. 244 (2005) 92
Park, H.-H., see Jung, S.-B. 244 (2005) 47
Park, H.-H., see Yang, J.-K. 244 (2005) 293
Park, M.-B. and N.-H. Cho, Effect of Mn coating materials of the nano-powders on phase transition of the nano-grained $BaTiO_3$ ceramics 244 (2005) 418
Park, M.-B. and N.-H. Cho, Control of chemical and electrical features near the grain boundary of the semiconducting $BaTiO_3$ oxides 244 (2005) 422
Park, S.-W., J.-M. Choi, E. Kim and S. Im, Inverted top-emitting organic light-emitting diodes using transparent conductive NiO electrode 244 (2005) 439
Pihosh, Y., M. Goto, A. Kasahara, T. Oishi and M. Tosa, Influence of reacting nitrogen gas consistence on the properties of TiN films prepared by rf. magnetron sputtering 244 (2005) 244
Pistora, J., see Antos, R. 244 (2005) 225
Plaksin, O.A., Y. Takeda, K. Kono, H. Amekura, N. Umeda and N. Kishimoto, Optical effects in silica glass during implantation of 60 keV Cu^- ions 244 (2005) 79
Poolton, N.R.J., see Nakamura, T. 244 (2005) 318
Prince, K.E., see Metson, J.B. 244 (2005) 264

Rabe, J.P., see Koch, N. 244 (2005) 593
Raharintsalama, R., H. Munakata, M. Koyama, M. Kubo and A. Miyamoto, Density functional theory studies on decomposition of ethyl-palladium complexes: an important role of cationic species 244 (2005) 631
Rajendran, A., Y. Takahashi, M. Koyama, M. Kubo and A. Miyamoto, Tight-binding quantum chemical molecular dynamics simulation of mechano-chemical reactions during chemical–mechanical polishing process of SiO_2 surface by CeO_2 particle 244 (2005) 34
Rebien, M., see Tanaka, S. 244 (2005) 326
Ruck, B.J., see Metson, J.B. 244 (2005) 264
Rzeznicka, I.I., see Ma, Y.-S. 244 (2005) 558
Rzeznicka, I.I., see Matsushima, T. 244 (2005) 141

Sagara, A., see Oyaidzu, M. 244 (2005) 240
Sagawa, J., S. Nagare and M. Senna, Preparation and properties of bovine serum albumin thin films by pulsed laser deposition 244 (2005) 611
Saito, M., C. Takeuchi, M. Mori, T. Tambo and C. Tatsuyama, Sb adsorption onto In nanocluster array structure formed on a Si(1 1 1)–(7 × 7) 244 (2005) 137

Sakakibara, S., Y. Inoue, H. Mimura, K. Ishino, A. Ishida and H. Fujiyasu, Zn_3N_2 compensated ZnTe films and ZnTe–ZnSe superlattices grown by hot wall epitaxy 244 (2005) 343
Sakuma, S., H. Kominami, Y. Neo, T. Aoki, Y. Nakanishi and H. Mimura, Effect of La and Zn addition on Y_2O_3:Eu phosphors 244 (2005) 458
Sakurai, K., see Iwata, K. 244 (2005) 504
Sakurai, K., see Kinoshita, H. 244 (2005) 314
Sakurai, K., see Starykov, O. 244 (2005) 235
Sanada, N., see Shimomura, M. 244 (2005) 153
Sano, Y., see Shimomura, M. 244 (2005) 153
Sasata, K., see Masuda, T. 244 (2005) 30
Sato, H., see Murai, H. 244 (2005) 351
Sato, H., see Tanaka, H. 244 (2005) 568
Sato, N., Y. Harada, T. Terashima, R. Kanda and M. Takano, Study of thin films of carrier-doped strontium titanate with emphasis on their interfaces with organic thin films 244 (2005) 588
Sato, T., see Edamoto, K. 244 (2005) 174
Sato, T., see Oikawa, T. 244 (2005) 84
Sato, T., see Shiozaki, N. 244 (2005) 71
Sato, Y., see Takagi, N. 244 (2005) 330
Schaff, W.J., see Brillson, L.J. 244 (2005) 257
Seino, T., see Ohara, K. 244 (2005) 369
Seki, K., see Ito, E. 244 (2005) 584
Seki, K., see Okabayashi, Y. 244 (2005) 217
Sekiguchi, T., see Chen, Z.Q. 244 (2005) 377
Senna, M., see Sagawa, J. 244 (2005) 611
Senna, M., see Taketani, I. 244 (2005) 623
Seno, Y., see Kato, N. 244 (2005) 281
Shigemori, S., see Ishihara, J. 244 (2005) 381
Shigemori, S., see Nakamura, A. 244 (2005) 385
Shimakawa, T., see Tanaka, H. 244 (2005) 568
Shimaoka, G., see Odawara, M. 244 (2005) 289
Shimaoka, G., see Udagawa, T. 244 (2005) 285
Shimawaki, H., see Mimura, H. 244 (2005) 498
Shimomura, M., Y. Sano, N. Sanada, L.L. Cao and Y. Fukuda, Surface structure and electronic states of sulfur-treated InP(1 1 1)A studied by LEED, AES, STM, and IPES 244 (2005) 153
Shiozaki, N., S. Anantathanasarn, T. Sato, T. Hashizume and H. Hasegawa, Surface-related reduction of photoluminescence in GaAs quantum wires and its recovery by new passivation 244 (2005) 71
Shirahata, N., see Hozumi, A. 244 (2005) 334
Shiraishi, K., see Ishizaki, H. 244 (2005) 186
Shiraishi, K., see Ito, T. 244 (2005) 178
Shirotori, Y., see Edamoto, K. 244 (2005) 174
Shoji, F., see Itoh, T. 244 (2005) 161
Singh, C.D., see Isobe, H. 244 (2005) 199
Sirghi, L., Y. Hatanaka and T. Aoki, Photocatalytic chemisorption of water on titanium dioxide thin films obtained by radio frequency magnetron deposition 244 (2005) 408
Solovjeva, O.V., see Sychov, M.M. 244 (2005) 461
Srivastava, G.P., Atomic-scale theoretical investigations of compound semiconductor surfaces 244 (2005) 129
Srivastava, G.P., see Miwa, R.H. 244 (2005) 157
Starykov, O. and K. Sakurai, Determination of interface roughness of Gd films deposited on Si surface using improved wavelet transform of X-ray reflectivity data 244 (2005) 235
Su, P.Y., see Lu, M.Y. 244 (2005) 96
Suda, T., see Ito, T. 244 (2005) 170
Suda, T., see Kawamoto, K. 244 (2005) 182
Sugimura, H., see Teshima, K. 244 (2005) 619
Sugiyama, H., see Terasawa, N. 244 (2005) 16
Sumitani, K., see Terasawa, N. 244 (2005) 16
Sumiya, M. and S. Fuke, Effect of treatments of sapphire substrate on growth of GaN film 244 (2005) 269
Summers, C.J., see King, J.S. 244 (2005) 511
Sun, X.L., see Brillson, L.J. 244 (2005) 257
Sun, Z.G., H. Kuramochi and H. Akinaga, Domain structures of nanocrystalline $Fe_{78}Si_{10}B_{12}$ thin films 244 (2005) 489
Suzuki, H., see Isobe, H. 244 (2005) 199
Suzuki, R., see Maekawa, M. 244 (2005) 322
Sychov, M.M., S.V. Mjakin, Y. Nakanishi, V.G. Korsakov, I.V. Vasiljeva, V.V. Bakhmetjev, O.V. Solovjeva and E.V. Komarov, Study of active surface centers in electroluminescent ZnS:Cu,Cl phosphors 244 (2005) 461

Tabe, M., see Maeda, M. 244 (2005) 61
Tabe, M., see Temmyo, J. 244 (2005) 1
Taguchi, A., see Ishizaki, H. 244 (2005) 186
Taguchi, A., see Ito, T. 244 (2005) 178
Taguchi, M., see Enomoto, Y. 244 (2005) 213
Takagi, K., see Yasuda, K. 244 (2005) 347
Takagi, N., Y. Sato, T. Matsuyama, H. Tatsuoka, M. Tanaka, C. Fengmin and H. Kuwabara, Growth and structural properties of Mg_2Si and Ca_2Si bulk crystals 244 (2005) 330
Takahashi, H., see Kubo, H. 244 (2005) 465
Takahashi, N., J. Nara, T. Uda, Y. Nakamura, Y. Tateyama and T. Ohno, Theoretical study on hydrogen reaction processes on H/Si(0 0 1) surface 244 (2005) 190
Takahashi, N., see Nakamura, T. 244 (2005) 318
Takahashi, T., see Terasawa, N. 244 (2005) 16
Takahashi, Y., see Rajendran, A. 244 (2005) 34
Takai, O., see Teshima, K. 244 (2005) 619
Takano, A., see Teshima, K. 244 (2005) 619
Takano, M., see Sato, N. 244 (2005) 588
Takeda, Y., K. Nakamura, T. Akiyama and T. Ito, Magnetic domain wall structures in free-standing Fe(110) monolayers 244 (2005) 485
Takeda, Y., N. Takeuchi, T. Fukano and T. Motohiro, Obliquely deposited metal films for polarizers 244 (2005) 209
Takeda, Y., see Plaksin, O.A. 244 (2005) 79
Taketani, I., S. Nakayama, S. Nagare and M. Senna, The secondary structure control of silk fibroin thin films by post treatment 244 (2005) 623
Takeuchi, C., see Saito, M. 244 (2005) 137
Takeuchi, N., see Takeda, Y. 244 (2005) 209
Tambo, T., see Saito, M. 244 (2005) 137

Tampo, H., see Iwata, K. 244 (2005) 504
Tan, R., Y. Azuma and I. Kojima, Influence of thickness of Hf buffer layer on the interfacial structures of sputtered HfO_2 on SiO_2/Si 244 (2005) 21
Tanaka, H., see Kanki, T. 244 (2005) 481
Tanaka, H., see Vilquin, B. 244 (2005) 494
Tanaka, H., see Yanagida, T. 244 (2005) 355
Tanaka, H., T. Shimakawa, T. Miyata, H. Sato and T. Minami, Effect of AZO film deposition conditions on the photovoltaic properties of AZO–Cu_2O heterojunctions 244 (2005) 568
Tanaka, M., see Takagi, N. 244 (2005) 330
Tanaka, M., see Tanaka, S. 244 (2005) 326
Tanaka, S., A. Yamamoto, S. Makiuchi, T. Matsuyama, M. Rebien, W. Henrion, H. Tatsuoka, M. Tanaka, Z.-Q. Liu and H. Kuwabara, Growth and morphological properties of β-$FeSi_2$ layers 244 (2005) 326
Tanemura, S., L. Miao, H. Watanabe and Y. Mori, Spectroscopic ellipsometry study on TiO_2 thin films modified by N_2–H_2 plasma surface treatment 244 (2005) 546
Tanemura, S., see Miao, L. 244 (2005) 412
Taniguchi, H., see Kaku, H. 244 (2005) 8
Tateyama, Y., see Takahashi, N. 244 (2005) 190
Tatsuoka, H., see Nakanishi, Y. 244 (2005) 359
Tatsuoka, H., see Takagi, N. 244 (2005) 330
Tatsuoka, H., see Tanaka, S. 244 (2005) 326
Tatsuyama, C., see Saito, M. 244 (2005) 137
Tazawa, M., see Xu, G. 244 (2005) 449
Temmyo, J., M. Tabe, Y. Nakanishi and Y. Fukuda, Preface 244 (2005) 1
Temmyo, J., see Ishihara, J. 244 (2005) 381
Temmyo, J., see Nakamura, A. 244 (2005) 385
Teraji, T., see Hashimoto, H. 244 (2005) 394
Teraji, T., see Wada, H. 244 (2005) 305
Teraji, T., see Yamamoto, M. 244 (2005) 310
Terasawa, N., K. Akimoto, Y. Mizuno, A. Ichimiya, K. Sumitani, T. Takahashi, X.W. Zhang, H. Sugiyama, H. Kawata, T. Nabatame and A. Toriumi, Crystallization process of high-k gate dielectrics studied by surface X-ray diffraction 244 (2005) 16
Terashima, T., see Sato, N. 244 (2005) 588
Teshima, K., H. Sugimura, Y. Inoue, O. Takai and A. Takano, Transparent ultra water-repellent poly(ethylene terephthalate) substrates fabricated by oxygen plasma treatment and subsequent hydrophobic coating 244 (2005) 619
Thomas, L., see Franta, D. 244 (2005) 426
Toh, S., see Miao, L. 244 (2005) 412
Tokunaga, S. and A. Mikami, Effects of Zn-doping on red-luminescence in Eu-doped (Mg,Ca)S phosphor films 244 (2005) 533
Tominaga, M., see Yasuda, K. 244 (2005) 347
Tomita, Y., see Kobayashi, K. 244 (2005) 389
Tomita, Y., Y. Hasegawa and K. Kobayashi, Nano-scale Cu metal patterning by using an atomic force microscope 244 (2005) 107
Toriumi, A., see Emoto, T. 244 (2005) 55
Toriumi, A., see Terasawa, N. 244 (2005) 16
Tosa, M., see Pihosh, Y. 244 (2005) 244
Toyama, T., K. Yoshimura, M. Fujii, H. Haze and H. Okamoto, Novel green thin-film electroluminescent devices utilizing ZnS nanocrystals doped with Tb compounds 244 (2005) 524
Toyoda, S., see Naono, T. 244 (2005) 277
Trodahl, H.J., see Metson, J.B. 244 (2005) 264
Tsai, W.C., H.C. Hsu, H.F. Hsu and L.J. Chen, Vacancy ordering in self-assembled erbium silicide nanowires on atomically clean Si(0 0 1) 244 (2005) 115
Tsukamoto, K., T. Kubo and H. Nozoye, Structure of mercaptoalcohol self-assembled monolayers on Au(1 1 1) 244 (2005) 578
Tumakha, S.H., see Brillson, L.J. 244 (2005) 257

Uda, T., see Takahashi, N. 244 (2005) 190
Udagawa, T., M. Odawara and G. Shimaoka, High-resolution TEM characterization of MOVPE-grown (1 1 1)-BP layer on hexagonal 6H (0 0 0 1)-SiC 244 (2005) 285
Udagawa, T., see Odawara, M. 244 (2005) 289
Umeda, N., see Plaksin, O.A. 244 (2005) 79

Vasiljeva, I.V., see Sychov, M.M. 244 (2005) 461
Vilquin, B., see Kanki, T. 244 (2005) 481
Vilquin, B., see Yanagida, T. 244 (2005) 355
Vilquin, B., T. Kanki, T. Yanagida, H. Tanaka and T. Kawai, Effect of Sr doping on $LaTiO_3$ thin films 244 (2005) 494
Visnovsky, S., see Antos, R. 244 (2005) 221
Visnovsky, S., see Antos, R. 244 (2005) 225
Vlasenko, O.I., see Gnatyuk, V.A. 244 (2005) 528

Wada, H., T. Teraji and T. Ito, Growth and characterization of P-doped CVD diamond (1 1 1) thin films homoepitaxially grown using trimethylphosphine 244 (2005) 305
Wang, X., see Agalya, G. 244 (2005) 195
Wang, X., see Lv, C. 244 (2005) 541
Watanabe, H., see Miao, L. 244 (2005) 412
Watanabe, H., see Tanemura, S. 244 (2005) 546
Watanabe, T., see Maeda, M. 244 (2005) 61
Watanabe, T., see Yamamoto, M. 244 (2005) 310

Xu, G., P. Jin, M. Tazawa and K. Yoshimura, Thickness dependence of optical properties of VO_2 thin films epitaxially grown on sapphire (0 0 0 1) 244 (2005) 449
Xu, Y., see Chen, Z.Q. 244 (2005) 377

Yamada, A., see Iwata, K. 244 (2005) 504
Yamaguchi, K., see Kobayashi, Y. 244 (2005) 88
Yamaguchi, T., see Antos, R. 244 (2005) 221
Yamaguchi, T., see Antos, R. 244 (2005) 225
Yamaguchi, T., see Franta, D. 244 (2005) 338
Yamaguchi, T., see Franta, D. 244 (2005) 426
Yamaguchi, T., see Gao, Y.Z. 244 (2005) 297

Yamaguchi, T., see Mistrik, J. 244 (2005) 51
Yamaguchi, T., see Mistrik, J. 244 (2005) 431
Yamamoto, A., see Tanaka, S. 244 (2005) 326
Yamamoto, M., T. Watanabe, M. Hamada, T. Teraji and T. Ito, Electrical properties of diamond *p–i–p* structures at high electric fields 244 (2005) 310
Yamamoto, S., see Chen, Z.Q. 244 (2005) 377
Yamamoto, Y., see Yasuda, K. 244 (2005) 347
Yamazaki, S., see Okabayashi, Y. 244 (2005) 217
Yanagida, T., see Kanki, T. 244 (2005) 481
Yanagida, T., see Vilquin, B. 244 (2005) 494
Yanagida, T., T. Kanki, B. Vilquin, H. Tanaka and T. Kawai, Transport and magnetic properties of Ce-doped $LaMnO_3$ thin films 244 (2005) 355
Yanase, E., see Fujii, Y. 244 (2005) 230
Yang, J.-K. and H.-H. Park, Incorporation of SiO_2 for the band alignment control of Gd_2O_3/*n*-GaAs(0 0 1) structure 244 (2005) 293
Yang, J.-K., see Choi, H.-J. 244 (2005) 92
Yasuda, K., M. Niraula, H. Kusama, Y. Yamamoto, M. Tominaga, K. Takagi and Y. Aagata, Control of Zn composition ($0<x<1$) in $Cd_{1-x}Zn_xTe$ epitaxial layers on GaAs substrates grown by MOVPE 244 (2005) 347
Yokoo, K., see Mimura, H. 244 (2005) 498
Yoon, M.H. and S. Im, Electrical characteristics of V_2O_5 thin films formed on p-Si by sputter-deposition and rapid thermal annealing 244 (2005) 444
Yoon, S., see Choi, H.-J. 244 (2005) 92
Yoon, Y.S., see Lee, J.J. 244 (2005) 365
Yoshida, T., see Nagatsu, M. 244 (2005) 111
Yoshida, Y., see Emoto, T. 244 (2005) 55
Yoshikawa, A., see Oyaidzu, M. 244 (2005) 240
Yoshikawa, M., see Kawasuso, A. 244 (2005) 149
Yoshikawa, M., see Maekawa, M. 244 (2005) 322
Yoshimura, K., see Toyama, T. 244 (2005) 524
Yoshimura, K., see Xu, G. 244 (2005) 449

Zhang, X.W., see Terasawa, N. 244 (2005) 16

ELSEVIER

Applied Surface Science 244 (2005) XI–XLIX

applied surface science

www.elsevier.com/locate/apsusc

Subject Index

Ab initio calculations

The geometry of Bi nanolines on Si(0 0 1), R.H. Miwa, J.M. MacLeod, G.P. Srivastava and A.B. McLean 244 (2005) 157

Theoretical investigation of phase transition on GaAs(0 0 1)-c(4 × 4) surface, H. Ishizaki, T. Akiyama, K. Nakamura, K. Shiraishi, A. Taguchi and T. Ito 244 (2005) 186

Electronic-state control of amino acids on semiconductor surfaces, M. Oda and T. Nakayama 244 (2005) 627

Ab-initio calculations

Carbon nanotube adsorbed on hydrogenated Si(0 0 1) surfaces, R.H. Miwa, W. Orellana and A. Fazzio 244 (2005) 124

Absorption

Structural and optical properties of 6,13-pentacenequinone film, D.K. Hwang, K. Kim, J.H. Kim, D.-Y. Jung, E. Kim and S. Im 244 (2005) 615

Acetone

Photocatalytic oxidation dynamics of acetone on TiO_2: tight-binding quantum chemical molecular dynamics study, C. Lv, X. Wang, G. Agalya, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 541

Active centers

Study of active surface centers in electroluminescent ZnS:Cu,Cl phosphors, M.M. Sychov, S.V. Mjakin, Y. Nakanishi, V.G. Korsakov, I.V. Vasiljeva, V.V. Bakhmetjev, O.V. Solovjeva and E.V. Komarov 244 (2005) 461

Adsorption

Photoemission spectroscopy study of the oxidation of HfC(1 0 0), K. Edamoto, Y. Shirotori, T. Sato and K. Ozawa 244 (2005) 174

An ab initio-based approach to Ga adatom migration on GaAs(*n* 1 1)A–(0 0 1) nonplanar surfaces, T. Ito, K. Asano, T. Akiyama, K. Nakamura, K. Shiraishi and A. Taguchi 244 (2005) 178

Adsorption effect

Measurements of critical micelle concentration (CMC) using optical fiber covered with porous sol–gel cladding, H. Isobe, C.D. Singh, H. Katsumata, H. Suzuki, T. Fujinami and M. Ogita 244 (2005) 199

AFM

Formation of pores in Ge single crystal by laser radiation, A. Medvid', A. Mychko, A. Krivich and P. Onufrijevs 244 (2005) 203

Ag deposition

STM observation of Bi line structures on the Si(1 0 0) surface with Ag deposition, T. Itoh, S. Kashirajima, M. Naitoh, S. Nishigaki and F. Shoji 244 (2005) 161

Aging characteristics

Effect of ITO surface state to the aging characteristics of thin film OLED, Y. Fukushi, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 537

Agostic palladium complex

Density functional theory studies on decomposition of ethyl-palladium complexes: an

doi:10.1016/S0169-4332(05)00454-X

important role of cationic species, R. Raharintsalama, H. Munakata, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 631

ALD

Crystallization process of high-k gate dielectrics studied by surface X-ray diffraction, N. Terasawa, K. Akimoto, Y. Mizuno, A. Ichimiya, K. Sumitani, T. Takahashi, X.W. Zhang, H. Sugiyama, H. Kawata, T. Nabatame and A. Toriumi 244 (2005) 16

AlGaAs

Surface-related reduction of photoluminescence in GaAs quantum wires and its recovery by new passivation, N. Shiozaki, S. Anantathanasarn, T. Sato, T. Hashizume and H. Hasegawa 244 (2005) 71

AlGaN

Study on ECR dry etching and selective MBE growth of AlGaN/GaN for fabrication of quantum nanostructures on GaN (0 0 0 1) substrates, T. Oikawa, F. Ishikawa, T. Sato, T. Hashizume and H. Hasegawa 244 (2005) 84
Local electronic and chemical structure at GaN, AlGaN and SiC heterointerfaces, L.J. Brillson, S.T. Bradley, S.H. Tumakha, S.H. Goss, X.L. Sun, R.S. Okojie, J. Hwang and W.J. Schaff 244 (2005) 257
Pt Schottky diode gas sensors formed on GaN and AlGaN/GaN heterostructure, K. Matsuo, N. Negoro, J. Kotani, T. Hashizume and H. Hasegawa 244 (2005) 273

Alkanethiol

Chain length dependence of adsorption structure of COOH-terminated alkanethiol SAMs on Au(1 1 1), E. Ito, K. Konno, J. Noh, K. Kanai, Y. Ouchi, K. Seki and M. Hara 244 (2005) 584

AlN

Enhancement of donor ionization in phosphorus-doped n-diamond, Y. Koide 244 (2005) 26

Alq_3

Preparation and characterization of Rhodamine B and Alq_3 thin films deposited by solution jet beam method, Y. Okabayashi, T. Mitarai, S. Yamazaki, R. Matsuyama, K. Kanai, Y. Ouchi and K. Seki 244 (2005) 217

Amino acid

Electronic-state control of amino acids on semiconductor surfaces, M. Oda and T. Nakayama 244 (2005) 627

Amorphous

In situ X-ray diffraction study of crystallization process of GeSbTe thin films during heat treatment, N. Kato, I. Konomi, Y. Seno and T. Motohiro 244 (2005) 281

Amorphous GaN

Characterisation of amorphous GaN films, J.B. Metson, B.J. Ruck, F. Budde, H.J. Trodahl, A. Bittar and K.E. Prince 244 (2005) 264

Amorphous semiconductor

Photocatalytic characteristics of hydro-oxygenated amorphous titanium oxide films prepared using remote plasma enhanced chemical vapor deposition, Y. Hatanaka[a], H. Naito[b], S. Itou[c] and M. Kando[b] 244 (2005) 554

Amorphous-CN_x:H

Formation of wide and narrow optical-band-gap amorphous-CN_x:H films using i-C_4H_{10}/N_2 supermagnetron plasma, H. Kinoshita, R. Ikuta and K. Sakurai 244 (2005) 314

Angular distribution

Inclined N_2 desorption in N_2O decomposition on Rh(1 1 0), T. Matsushima, K. Imamura, H. Horino, A. Hiratsuka, Y.-S. Ma, I.I. Rzeznicka and O. Nakagoe 244 (2005) 141
Separation of nitrogen removal pathways in a steady-state NO + CO reaction on Pd(1 1 0): an angle-resolved desorption study, Y.-S. Ma, I.I. Rzeznicka and T. Matsushima 244 (2005) 558

Annealing

Influence of thickness of Hf buffer layer on the interfacial structures of sputtered HfO_2 on SiO_2/Si, R. Tan, Y. Azuma and I. Kojima 244 (2005) 21

HRTEM observation of interface states between ZnO epitaxial film and Si(1 1 1) substrate, Y. Nakanishi, A. Miyake, H. Tatsuoka, H. Kominami, H. Kuwabara and Y. Hatanaka 244 (2005) 359
Nanocrystalline WO_3 films prepared by two-step annealing, A.H. Jayatissa, A. Dadi and T. Aoki 244 (2005) 453
Preparation of CaS:Cu,F thin-film electroluminescent devices with an emission including purple region, S. Hakamata, M. Ehara, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 469

Antimony

Sb adsorption onto In nanocluster array structure formed on a Si(1 1 1)–(7 × 7), M. Saito, C. Takeuchi, M. Mori, T. Tambo and C. Tatsuyama 244 (2005) 137

Atomic force microscope

Nano-scale Cu metal patterning by using an atomic force microscope, Y. Tomita, Y. Hasegawa and K. Kobayashi 244 (2005) 107
Nano-photocatalytic decomposition of a stearic acid film deposited on the TiO_2 by an atomic force microscope, K. Kobayashi, Y. Tomita, K. Matsuhisa and Y. Doi 244 (2005) 389

Atomic hydrogen

Theoretical study on hydrogen reaction processes on H/Si(0 0 1) surface, N. Takahashi, J. Nara, T. Uda, Y. Nakamura, Y. Tateyama and T. Ohno 244 (2005) 190

Au(1 1 1)

Structure of mercaptoalcohol self-assembled monolayers on Au(1 1 1), K. Tsukamoto, T. Kubo and H. Nozoye 244 (2005) 578

Auger electron spectroscopy

Surface structure and electronic states of sulfur-treated InP(1 1 1)A studied by LEED, AES, STM, and IPES, M. Shimomura, Y. Sano, N. Sanada, L.L. Cao and Y. Fukuda 244 (2005) 153

AZO

Effect of AZO film deposition conditions on the photovoltaic properties of AZO–Cu_2O heterojunctions, H. Tanaka, T. Shimakawa, T. Miyata, H. Sato and T. Minami 244 (2005) 568

Ballistic deposition

Modelling of columnar growth in continuum ballistic deposition, Y. Enomoto and M. Taguchi 244 (2005) 213

Band offset

Incorporation of SiO_2 for the band alignment control of Gd_2O_3/*n*-GaAs(0 0 1) structure, J.-K. Yang and H.-H. Park 244 (2005) 293

Bandgap engineering

Growth of ZnO and device applications, K. Iwata, H. Tampo, A. Yamada, P. Fons, K. Matsubara, K. Sakurai, S. Ishizuka and S. Niki 244 (2005) 504

Barrier structure

Metal–semiconductor interfaces in CdTe crystals and modification of their properties by laser pulses, V.A. Gnatyuk, T. Aoki, Y. Hatanaka and O.I. Vlasenko 244 (2005) 528

$BaTiO_3$

Effect of Mn coating materials of the nanopowders on phase transition of the nanograined $BaTiO_3$ ceramics, M.-B. Park and N.-H. Cho 244 (2005) 418
Control of chemical and electrical features near the grain boundary of the semiconducting $BaTiO_3$ oxides, M.-B. Park and N.-H. Cho 244 (2005) 422

Biaxial anisotropy

Magnetic properties of $Fe_{70-x}Co_{30-y}N_{x+y}$ thin films, C.Y. Li and J.G. Duh 244 (2005) 477

Bio-device

Electronic-state control of amino acids on semiconductor surfaces, M. Oda and T. Nakayama 244 (2005) 627

bis-Ethylcyclopentadienyl magnesium ($EtCp_2Mg$)

Growth of $Mg_xZn_{1-x}O$ films using remote plasma MOCVD, A. Nakamura, J. Ishihara, S. Shigemori, T. Aoki and J. Temmyo 244 (2005) 385

Bismuth

STM observation of Bi line structures on the Si(1 0 0) surface with Ag deposition, T. Itoh, S. Kashirajima, M. Naitoh, S. Nishigaki and F. Shoji 244 (2005) 161

Boron activation

Tight-binding quantum chemical molecular dynamics simulation of boron activation process in crystalline silicon, T. Masuda, K. Sasata, M. Elanany, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 30

Boron coating film

Preparation of pure boron coating film and its characterization by XPS and TDS, M. Oyaidzu, A. Yoshikawa, H. Kodama, Y. Oya, A. Sagara, N. Noda and K. Okuno 244 (2005) 240

Boron penetration

Thermal redistribution of hydrogen and boron in SiO_2 in SiN-capped p-type MOSFET structures, Y. Kawashima, S. Aoyagi and M. Kudo 244 (2005) 43

Boronization

Preparation of pure boron coating film and its characterization by XPS and TDS, M. Oyaidzu, A. Yoshikawa, H. Kodama, Y. Oya, A. Sagara, N. Noda and K. Okuno 244 (2005) 240

Bottom-emitting organic light-emitting device (BE-OLED)

Inverted top-emitting organic light-emitting diodes using transparent conductive NiO electrode, S.-W. Park, J.-M. Choi, E. Kim and S. Im 244 (2005) 439

Bovine serum albumin (BSA)

Preparation and properties of bovine serum albumin thin films by pulsed laser deposition, J. Sagawa, S. Nagare and M. Senna 244 (2005) 611

Brij-76

Electrical and mechanical properties of surfactant-templated mesoporous silica thin films using Brij-76 surfactant, S.-B. Jung, C.-K. Han and H.-H. Park 244 (2005) 47

Buffer layer

Preparation of CaS:Cu,F thin-film electroluminescent devices with an emission including purple region, S. Hakamata, M. Ehara, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 469

Carbon nanotube

Carbon nanotube adsorbed on hydrogenated Si(0 0 1) surfaces, R.H. Miwa, W. Orellana and A. Fazzio 244 (2005) 124

Carrier injection

Electronic-state control of amino acids on semiconductor surfaces, M. Oda and T. Nakayama 244 (2005) 627

Cathode luminescence

Effect of La and Zn addition on Y_2O_3:Eu phosphors, S. Sakuma, H. Kominami, Y. Neo, T. Aoki, Y. Nakanishi and H. Mimura 244 (2005) 458

Cathodoluminescence

Local electronic and chemical structure at GaN, AlGaN and SiC heterointerfaces, L.J. Brillson, S.T. Bradley, S.H. Tumakha, S.H. Goss, X.L. Sun, R.S. Okojie, J. Hwang and W.J. Schaff 244 (2005) 257

Cationic palladium complex

Density functional theory studies on decomposition of ethyl-palladium complexes: an important role of cationic species, R. Raharintsalama, H. Munakata, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 631

cBN

Enhancement of donor ionization in phosphorus-doped n-diamond, Y. Koide 244 (2005) 26

CdS homojunction

Improvement in the light emission characteristics of CdS:Cu/CdS diodes, H. Murai, T. Abe, J. Matsuda, H. Sato, S. Chiba and Y. Kashiwaba 244 (2005) 351

CdS thin film

Improvement in the light emission characteristics of CdS:Cu/CdS diodes, H. Murai, T. Abe, J. Matsuda, H. Sato, S. Chiba and Y. Kashiwaba 244 (2005) 351

CdSe

Changes in the electronic energy structure of CdSe nanocrystals of close-packed array by in situ anneal, H.-J. Choi, J.-K. Yang, S. Yoon and H.-H. Park 244 (2005) 92

CdTe crystal

Metal–semiconductor interfaces in CdTe crystals and modification of their properties by laser pulses, V.A. Gnatyuk, T. Aoki, Y. Hatanaka and O.I. Vlasenko 244 (2005) 528

CdZnTe

Control of Zn composition ($0 < x < 1$) in $Cd_{1-x}Zn_xTe$ epitaxial layers on GaAs substrates grown by MOVPE, K. Yasuda, M. Niraula, H. Kusama, Y. Yamamoto, M. Tominaga, K. Takagi and Y. Aagata 244 (2005) 347

Cell adhesion

Corrosion and cell adhesion behavior of TiN-coated and ion-nitrided titanium for dental applications, H.-H. Huang, C.-H. Hsu, S.-J. Pan, J.-L. He, C.-C. Chen and T.-L. Lee 244 (2005) 252

Cermet anode

Large-scale calculations of solid oxide fuel cell cermet anode by tight-binding quantum chemistry method, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 598

μc-Ge

Formation of microcrystalline germanium (μc-Ge:H) films from inductively coupled plasma CVD, Y. Okamoto, K. Makihara, S. Higashi and S. Miyazaki 244 (2005) 12

Change of refractive index

Evidence of refractive index change in glass substrates induced by high-density reactive ion plating deposition of SiO_2 films, J. Mistrik, I. Ohlidal, R. Antos, M. Aoyama and T. Yamaguchi 244 (2005) 51

I–V characteristics

Ultraviolet enhanced Si-photodetector using p-NiO films, J.-M. Choi and S. Im 244 (2005) 435

Characterization

High-resolution TEM characterization of MOVPE-grown (1 1 1)-BP layer on hexagonal 6H (0 0 0 1)-SiC, T. Udagawa, M. Odawara and G. Shimaoka 244 (2005) 285

Morphological investigation of double positioning growth of (1 1 1)-boron phosphide (BP) on the (0 0 0 1)-GaN, M. Odawara, T. Udagawa and G. Shimaoka 244 (2005) 289

Chemical composition

Structural and compositional characterization of N_2–H_2 plasma surface-treated TiO_2 thin films, L. Miao, S. Tanemura, H. Watanabe, S. Toh and K. Kaneko 244 (2005) 412

Chemical vapor deposition

Formation of wide and narrow optical-band-gap amorphous-CN_x:H films using i-C_4H_{10}/N_2 supermagnetron plasma, H. Kinoshita, R. Ikuta and K. Sakurai 244 (2005) 314

Chemical–mechanical polishing

Tight-binding quantum chemical molecular dynamics simulation of mechano-chemical reactions during chemical–mechanical polishing process of SiO_2 surface by CeO_2 particle, A. Rajendran, Y. Takahashi, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 34

Chromaticity

Effect of La and Zn addition on Y_2O_3:Eu phosphors, S. Sakuma, H. Kominami, Y. Neo, T. Aoki, Y. Nakanishi and H. Mimura 244 (2005) 458

Chromium carbide

Microstructures and mechanical properties evaluation of hard chromized austenitic Fe–Mn–Al alloys, J.-W. Lee 244 (2005) 248

Citric acid gel method

Effect of La and Zn addition on Y_2O_3:Eu phosphors, S. Sakuma, H. Kominami, Y. Neo, T. Aoki, Y. Nakanishi and H. Mimura 244 (2005) 458

CL

Luminescent properties of $SrGa_2S_4$:Eu thin film phosphors deposited by two electron beam evaporation, Y. Arai, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 473

Cl_2 gas

Chlorine gas sensors with high sensitivity using Mg-phthalocyanine thin films, T. Miyata and T. Minami 244 (2005) 563

Coating

Corrosion and cell adhesion behavior of TiN-coated and ion-nitrided titanium for dental applications, H.-H. Huang, C.-H. Hsu, S.-J. Pan, J.-L. He, C.-C. Chen and T.-L. Lee 244 (2005) 252

Columnar structure

Modelling of columnar growth in continuum ballistic deposition, Y. Enomoto and M. Taguchi 244 (2005) 213

Complex dielectric constant

Spectroscopic ellipsometry study on TiO_2 thin films modified by N_2–H_2 plasma surface treatment, S. Tanemura, L. Miao, H. Watanabe and Y. Mori 244 (2005) 546

Complex refractive index

Spectroscopic ellipsometry study on TiO_2 thin films modified by N_2–H_2 plasma surface treatment, S. Tanemura, L. Miao, H. Watanabe and Y. Mori 244 (2005) 546

Compound semiconductors

Atomic-scale theoretical investigations of compound semiconductor surfaces, G.P. Srivastava 244 (2005) 129

Computer simulation

An empirical potential approach to structural stability of GaN_xAs_{1-x} thin films on GaAs(1 1 1), T. Ito, T. Suda, T. Akiyama and K. Nakamura 244 (2005) 170

An ab initio-based approach to Ga adatom migration on GaAs(n 1 1)A–(0 0 1) non-planar surfaces, T. Ito, K. Asano, T. Akiyama, K. Nakamura, K. Shiraishi and A. Taguchi 244 (2005) 178

Conducting polymer

Theoretical study on the electronic and molecular properties of ground and excited states of ethylenedioxythiophene and styrenesulphonic acid, G. Agalya, C. Lv, X. Wang, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 195

Energy level alignment at interfaces with pentacene: metals versus conducting polymers, N. Koch, A. Elschner, R.L. Johnson and J.P. Rabe 244 (2005) 593

Conduction control

Sb excimer-laser doping in ZnO films prepared by oxidation of sulfide on Si, K. Ohara, T. Seino, A. Nakamura, T. Aoki, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 369

Configuration interaction singles

Theoretical study on the electronic and molecular properties of ground and excited states of ethylenedioxythiophene and styrenesulphonic acid, G. Agalya, C. Lv, X. Wang, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 195

COOH-terminated alkanethiol

Chain length dependence of adsorption structure of COOH-terminated alkanethiol SAMs on Au(1 1 1), E. Ito, K. Konno, J. Noh, K. Kanai, Y. Ouchi, K. Seki and M. Hara 244 (2005) 584

Corrosion

Corrosion and cell adhesion behavior of TiN-coated and ion-nitrided titanium for dental applications, H.-H. Huang, C.-H. Hsu, S.-J. Pan, J.-L. He, C.-C. Chen and T.-L. Lee 244 (2005) 252

Crystal structure

Crystallization process of high-k gate dielectrics studied by surface X-ray diffraction, N. Terasawa, K. Akimoto, Y. Mizuno, A. Ichimiya, K. Sumitani, T. Takahashi, X.W. Zhang, H. Sugiyama, H. Kawata, T. Nabatame and A. Toriumi 244 (2005) 16

Crystalline silicon

Tight-binding quantum chemical molecular dynamics simulation of boron activation process in crystalline silicon, T. Masuda, K. Sasata, M. Elanany, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 30

Crystallinity

Formation of microcrystalline germanium (μc-Ge:H) films from inductively coupled plasma CVD, Y. Okamoto, K. Makihara, S. Higashi and S. Miyazaki 244 (2005) 12

Crystallization

A new crystallization technique of Si films on glass substrate using thermal plasma jet, H. Kaku, S. Higashi, H. Taniguchi, H. Murakami and S. Miyazaki 244 (2005) 8

In situ X-ray diffraction study of crystallization process of GeSbTe thin films during heat treatment, N. Kato, I. Konomi, Y. Seno and T. Motohiro 244 (2005) 281

Cu/CeO_2

Large-scale calculations of solid oxide fuel cell cermet anode by tight-binding quantum chemistry method, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 598

Cu-doping

Improvement in the light emission characteristics of CdS:Cu/CdS diodes, H. Murai, T. Abe, J. Matsuda, H. Sato, S. Chiba and Y. Kashiwaba 244 (2005) 351

Cu_2O

Effect of AZO film deposition conditions on the photovoltaic properties of AZO–Cu_2O heterojunctions, H. Tanaka, T. Shimakawa, T. Miyata, H. Sato and T. Minami 244 (2005) 568

Cu-phthalocyanine

Unoccupied electronic band structure of conjugated molecular films interfacing polycrystalline gold surface, A. Komolov and P.J. Møller 244 (2005) 573

Current–voltage characteristic

Metal–semiconductor interfaces in CdTe crystals and modification of their properties by laser pulses, V.A. Gnatyuk, T. Aoki, Y. Hatanaka and O.I. Vlasenko 244 (2005) 528

CVD

Optical and structural properties of CVD-grown single crystal SiO_2 using optically detected XAS, T. Nakamura, N. Takahashi, N.R.J. Poolton and A.E.R. Malins 244 (2005) 318

CVD diamond

Oxidization process of CVD diamond (1 0 0):H 2 × 1 surfaces, J. Nakamura and T. Ito 244 (2005) 301

2D lattice

2D lattice formation by YAG:Nd laser on the surface of Ge single crystal, A. Medvid, Y. Fukuda, A. Michko, P. Onufrievs and Y. Anma 244 (2005) 120

Decomposition

Inclined N_2 desorption in N_2O decomposition on Rh(1 1 0), T. Matsushima, K. Imamura, H. Horino, A. Hiratsuka, Y.-S. Ma, I.I. Rzeznicka and O. Nakagoe 244 (2005) 141

Separation of nitrogen removal pathways in a steady-state NO + CO reaction on Pd(1 1 0): an angle-resolved desorption study, Y.-S. Ma, I.I. Rzeznicka and T. Matsushima 244 (2005) 558

Deep dopant

Enhancement of donor ionization in phosphorus-doped n-diamond, Y. Koide 244 (2005) 26

Defect engineering

Hydrogen and helium interactions in Si: phenomena obscure and not-so-obscure, S. Ashok 244 (2005) 2

Defects

Vacancy ordering in self-assembled erbium silicide nanowires on atomically clean Si(0 0 1), W.C. Tsai, H.C. Hsu, H.F. Hsu and L.J. Chen 244 (2005) 115

Density functional theory

Atomic-scale theoretical investigations of compound semiconductor surfaces, G.P. Srivastava 244 (2005) 129

Density functional theory studies on decomposition of ethyl-palladium complexes: an important role of cationic species, R. Raharintsalama, H. Munakata, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 631

Computational chemistry study of solid and aqueous solution interface, U. Mart, C. Jung, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 640

Deposition

Influence of Si_3N_4 and ZnS films on transmittance of InAsSb/InAsPSb heterostructures, Y.Z. Gao, X.Y. Gong, W.Z. Fang, H.Y. Deng, G.J. Hu, M. Aoyama, T. Yamaguchi and N. Dai 244 (2005) 297

Deposition process

Growth and morphological properties of β-$FeSi_2$ layers, S. Tanaka, A. Yamamoto, S. Makiuchi, T. Matsuyama, M. Rebien, W. Henrion, H. Tatsuoka, M. Tanaka, Z.-Q. Liu and H. Kuwabara 244 (2005) 326

Growth and structural properties of Mg_2Si and Ca_2Si bulk crystals, N. Takagi, Y. Sato, T. Matsuyama, H. Tatsuoka, M. Tanaka, C. Fengmin and H. Kuwabara 244 (2005) 330

Depth profiling

Depth profiling of the strain distribution in the surface layer using X-ray diffraction at small glancing angle of incidence, Y. Fujii, E. Yanase and K. Arai 244 (2005) 230

Diamond

Enhancement of donor ionization in phosphorus-doped n-diamond, Y. Koide 244 (2005) 26

Growth and characterization of P-doped CVD diamond (1 1 1) thin films homoepitaxially grown using trimethylphosphine, H. Wada, T. Teraji and T. Ito 244 (2005) 305

Electrical properties of diamond *p–i–p* structures at high electric fields, M. Yamamoto, T. Watanabe, M. Hamada, T. Teraji and T. Ito 244 (2005) 310

Dichroism

Obliquely deposited metal films for polarizers, Y. Takeda, N. Takeuchi, T. Fukano and T. Motohiro 244 (2005) 209

Diethyl zinc

Growth and characterization of $Zn_{1-x}Cd_xO$ films using remote plasma MOCVD, J. Ishihara, A. Nakamura, S. Shigemori, T. Aoki and J. Temmyo 244 (2005) 381

Diethyl zinc (DEZn)

Growth of $Mg_xZn_{1-x}O$ films using remote plasma MOCVD, A. Nakamura, J. Ishihara, S. Shigemori, T. Aoki and J. Temmyo 244 (2005) 385

Differential self-consistent-field-based density functional theory

Theoretical study on the electronic and molecular properties of ground and excited states of ethylenedioxythiophene and styrenesulphonic acid, G. Agalya, C. Lv, X. Wang, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 195

Diffraction grating

Spectroscopic ellipsometry on lamellar gratings, R. Antos, I. Ohlidal, J. Mistrik, K. Murakami, T. Yamaguchi, J. Pistora, M. Horie and S. Visnovsky 244 (2005) 225

Diffraction pattern

Reflection high-energy positron diffraction study of a Si(0 0 1) surface, K. Hayashi, Y. Fukaya, A. Kawasuso and A. Ichimiya 244 (2005) 145

Diffusion

Growth and morphological properties of β-$FeSi_2$ layers, S. Tanaka, A. Yamamoto, S. Makiuchi, T. Matsuyama, M. Rebien, W. Henrion, H. Tatsuoka, M. Tanaka, Z.-Q. Liu and H. Kuwabara 244 (2005) 326

Growth and structural properties of Mg_2Si and Ca_2Si bulk crystals, N. Takagi, Y. Sato, T. Matsuyama, H. Tatsuoka, M. Tanaka, C. Fengmin and H. Kuwabara 244 (2005) 330

Diffusion kinetic parameters

Control of chemical and electrical features near the grain boundary of the semiconducting $BaTiO_3$ oxides, M.-B. Park and N.-H. Cho 244 (2005) 422

Diffusivity

Thermal redistribution of hydrogen and boron in SiO_2 in SiN-capped p-type MOSFET structures, Y. Kawashima, S. Aoyagi and M. Kudo 244 (2005) 43

Dimethyl cadmium

Growth and characterization of $Zn_{1-x}Cd_xO$ films using remote plasma MOCVD, J. Ishihara, A. Nakamura, S. Shigemori, T. Aoki and J. Temmyo 244 (2005) 381

Dislocation

An empirical potential approach to dislocation formation and structural stability in GaN_xAs_{1-x}, K. Kawamoto, T. Suda, T. Akiyama, K. Nakamura and T. Ito 244 (2005) 182

Display devices

Novel green thin-film electroluminescent devices utilizing ZnS nanocrystals doped with Tb compounds, T. Toyama, K. Yoshimura, M. Fujii, H. Haze and H. Okamoto 244 (2005) 524

Displays

Microcavity effects and the outcoupling of light in displays and lighting applications based on thin emitting films, K. Neyts 244 (2005) 517

Domain structures

Domain structures of nanocrystalline $Fe_{78}Si_{10}B_{12}$ thin films, Z.G. Sun, H. Kuramochi and H. Akinaga 244 (2005) 489

Dopant activation

Hydrogen and helium interactions in Si: phenomena obscure and not-so-obscure, S. Ashok 244 (2005) 2

Doping

Metal–semiconductor interfaces in CdTe crystals and modification of their properties by laser pulses, V.A. Gnatyuk, T. Aoki, Y. Hatanaka and O.I. Vlasenko 244 (2005) 528

Dry etching

Study on ECR dry etching and selective MBE growth of AlGaN/GaN for fabrication of quantum nanostructures on GaN (0 0 0 1) substrates, T. Oikawa, F. Ishikawa, T. Sato, T. Hashizume and H. Hasegawa 244 (2005) 84

Dry oxidation

Structural defects in SiO_2/SiC interface probed by a slow positron beam, M. Maekawa, A. Kawasuso, Z.Q. Chen, M. Yoshikawa, R. Suzuki and T. Ohdaira 244 (2005) 322

Dynamical calculation

Reflection high-energy positron diffraction study of a Si(0 0 1) surface, K. Hayashi, Y. Fukaya, A. Kawasuso and A. Ichimiya 244 (2005) 145

EL

Preparation of CaS:Cu,F thin-film electroluminescent devices with an emission including purple region, S. Hakamata, M. Ehara, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 469

Electrical properties

Effect of Sr doping on $LaTiO_3$ thin films, B. Vilquin, T. Kanki, T. Yanagida, H. Tanaka and T. Kawai 244 (2005) 494

Electroluminescence

Microcavity effects and the outcoupling of light in displays and lighting applications based on thin emitting films, K. Neyts 244 (2005) 517

Novel green thin-film electroluminescent devices utilizing ZnS nanocrystals doped

with Tb compounds, T. Toyama, K. Yoshimura, M. Fujii, H. Haze and H. Okamoto 244 (2005) 524

Electron beam evaporation

Luminescent properties of $SrGa_2S_4$:Eu thin film phosphors deposited by two electron beam evaporation, Y. Arai, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 473

Electron counting Monte Carlo simulation

Theoretical investigation of phase transition on GaAs(0 0 1)-c(4 × 4) surface, H. Ishizaki, T. Akiyama, K. Nakamura, K. Shiraishi, A. Taguchi and T. Ito 244 (2005) 186

Electron emission

Emission characteristics and application of semiconductor field emitters, H. Mimura, Y. Neo, H. Shimawaki, T. Matsumoto and K. Yokoo 244 (2005) 498

Electronic structure

Changes in the electronic energy structure of CdSe nanocrystals of close-packed array by in situ anneal, H.-J. Choi, J.-K. Yang, S. Yoon and H.-H. Park 244 (2005) 92

Energy level alignment at interfaces with pentacene: metals versus conducting polymers, N. Koch, A. Elschner, R.L. Johnson and J.P. Rabe 244 (2005) 593

Electron-solid scattering and transmission elastic

Unoccupied electronic band structure of conjugated molecular films interfacing polycrystalline gold surface, A. Komolov and P.J. Møller 244 (2005) 573

Electrostatic energy

An empirical potential approach to dislocation formation and structural stability in GaN_xAs_{1-x}, K. Kawamoto, T. Suda, T. Akiyama, K. Nakamura and T. Ito 244 (2005) 182

Ellipsometry

Evidence of refractive index change in glass substrates induced by high-density reactive ion plating deposition of SiO_2 films, J. Mistrik, I. Ohlidal, R. Antos, M. Aoyama and T. Yamaguchi 244 (2005) 51

Optical characterization of sol–gel deposited PZT thin films by spectroscopic ellipsometry and reflectometry in near-UV and visible regions, D. Franta, I. Ohlídal, J. Mistrík, T. Yamaguchi, G.J. Hu and N. Dai 244 (2005) 338

Optical properties of NiO thin films prepared by pulsed laser deposition technique, D. Franta, B. Negulescu, L. Thomas, P.R. Dahoo, M. Guyot, I. Ohlídal, J. Mistrík and T. Yamaguchi 244 (2005) 426

Optical properties of rough $LaNiO_3$ thin films studied by spectroscopic ellipsometry and reflectometry, J. Mistrik, T. Yamaguchi, D. Franta, I. Ohlidal, G.J. Hu and N. Dai 244 (2005) 431

Energy distribution

Theoretical study on hydrogen reaction processes on H/Si(0 0 1) surface, N. Takahashi, J. Nara, T. Uda, Y. Nakamura, Y. Tateyama and T. Ohno 244 (2005) 190

Energy level alignment

Study of thin films of carrier-doped strontium titanate with emphasis on their interfaces with organic thin films, N. Sato, Y. Harada, T. Terashima, R. Kanda and M. Takano 244 (2005) 588

Energy-efficient window

Thickness dependence of optical properties of VO_2 thin films epitaxially grown on sapphire (0 0 0 1), G. Xu, P. Jin, M. Tazawa and K. Yoshimura 244 (2005) 449

Epitaxial growth

HRTEM observation of interface states between ZnO epitaxial film and Si(1 1 1) substrate, Y. Nakanishi, A. Miyake, H. Tatsuoka, H. Kominami, H. Kuwabara and Y. Hatanaka 244 (2005) 359

Sb excimer-laser doping in ZnO films prepared by oxidation of sulfide on Si, K. Ohara, T. Seino, A. Nakamura, T. Aoki, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 369

Epitaxy

Surface elemental segregation and the Stranski–Krastanow epitaxial islanding transition, A.G. Cullis, D.J. Norris, M.A. Migliorato and M. Hopkinson 244 (2005) 65

Vacancy ordering in self-assembled erbium silicide nanowires on atomically clean Si(0 0 1), W.C. Tsai, H.C. Hsu, H.F. Hsu and L.J. Chen 244 (2005) 115

Excited state

Theoretical study on the electronic and molecular properties of ground and excited states of ethylenedioxythiophene and styrenesulphonic acid, G. Agalya, C. Lv, X. Wang, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 195

Excited state dynamics

Photocatalytic oxidation dynamics of acetone on TiO_2: tight-binding quantum chemical molecular dynamics study, C. Lv, X. Wang, G. Agalya, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 541

Exciton

HRTEM observation of interface states between ZnO epitaxial film and Si(1 1 1) substrate, Y. Nakanishi, A. Miyake, H. Tatsuoka, H. Kominami, H. Kuwabara and Y. Hatanaka 244 (2005) 359

Exothermicity

Theoretical study on hydrogen reaction processes on H/Si(0 0 1) surface, N. Takahashi, J. Nara, T. Uda, Y. Nakamura, Y. Tateyama and T. Ohno 244 (2005) 190

Fe(1 1 0) monolayer

Magnetic domain wall structures in free-standing Fe(1 1 0) monolayers, Y. Takeda, K. Nakamura, T. Akiyama and T. Ito 244 (2005) 485

FeCoN

Magnetic properties of $Fe_{70-x}Co_{30-y}N_{x+y}$ thin films, C.Y. Li and J.G. Duh 244 (2005) 477

FED

Luminescent properties of $SrGa_2S_4$:Eu thin film phosphors deposited by two electron beam evaporation, Y. Arai, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 473

Fe–Mn–Al alloys

Microstructures and mechanical properties evaluation of hard chromized austenitic Fe–Mn–Al alloys, J.-W. Lee 244 (2005) 248

Ferromagnetic materials

Magnetic properties of $Fe_{70-x}Co_{30-y}N_{x+y}$ thin films, C.Y. Li and J.G. Duh 244 (2005) 477

Field emission

Characterization of amorphous carbon film-coated nanotubes as electron field emission material, M. Nagatsu, T. Yoshida, S. Kurita and K. Murakami 244 (2005) 111

Field emitters

Emission characteristics and application of semiconductor field emitters, H. Mimura, Y. Neo, H. Shimawaki, T. Matsumoto and K. Yokoo 244 (2005) 498

Film

Characterization of homoepitaxial and heteroepitaxial ZnO films grown by pulsed laser deposition, Z.Q. Chen, S. Yamamoto, A. Kawasuso, Y. Xu and T. Sekiguchi 244 (2005) 377

Film structure

Infrared spectroscopy of pentacene thin film on SiO_2 surface, Y. Hosoi, K. Okamura, Y. Kimura, H. Ishii and M. Niwano 244 (2005) 607

First principles calculations

Magnetic domain wall structures in free-standing Fe(1 1 0) monolayers, Y. Takeda, K. Nakamura, T. Akiyama and T. Ito 244 (2005) 485
Theoretical study on hydrogen reaction processes on H/Si(0 0 1) surface, N. Takahashi, J. Nara, T. Uda, Y. Nakamura, Y. Tateyama and T. Ohno 244 (2005) 190

Fowler–Nordheim relation

Electrical properties of diamond *p–i–p* structures at high electric fields, M. Yamamoto, T. Watanabe, M. Hamada, T. Teraji and T. Ito 244 (2005) 310

FTIR

Influence of Si_3N_4 and ZnS films on transmittance of InAsSb/InAsPSb heterostructures, Y.Z. Gao, X.Y. Gong, W.Z. Fang, H.Y. Deng, G.J. Hu, M. Aoyama, T. Yamaguchi and N. Dai 244 (2005) 297

GaAs

Surface-related reduction of photoluminescence in GaAs quantum wires and its recovery by new passivation, N. Shiozaki, S. Anantathanasarn, T. Sato, T. Hashizume and H. Hasegawa 244 (2005) 71

Control of photoluminescence wavelength from uniform InAs quantum dots by annealing, Y. Kobayashi and K. Yamaguchi 244 (2005) 88

An ab initio-based approach to Ga adatom migration on GaAs(n 1 1)A–(0 0 1) nonplanar surfaces, T. Ito, K. Asano, T. Akiyama, K. Nakamura, K. Shiraishi and A. Taguchi 244 (2005) 178

Incorporation of SiO_2 for the band alignment control of Gd_2O_3/n-GaAs(0 0 1) structure, J.-K. Yang and H.-H. Park 244 (2005) 293

GaAs substrate

Zn_3N_2 compensated ZnTe films and ZnTe–ZnSe superlattices grown by hot wall epitaxy, S. Sakakibara, Y. Inoue, H. Mimura, K. Ishino, A. Ishida and H. Fujiyasu 244 (2005) 343

GaAs surfaces

Theoretical investigation of phase transition on GaAs(0 0 1)-c(4 × 4) surface, H. Ishizaki, T. Akiyama, K. Nakamura, K. Shiraishi, A. Taguchi and T. Ito 244 (2005) 186

GaN

Study on ECR dry etching and selective MBE growth of AlGaN/GaN for fabrication of quantum nanostructures on GaN (0 0 0 1) substrates, T. Oikawa, F. Ishikawa, T. Sato, T. Hashizume and H. Hasegawa 244 (2005) 84

Local electronic and chemical structure at GaN, AlGaN and SiC heterointerfaces, L.J. Brillson, S.T. Bradley, S.H. Tumakha, S.H. Goss, X.L. Sun, R.S. Okojie, J. Hwang and W.J. Schaff 244 (2005) 257

Pt Schottky diode gas sensors formed on GaN and AlGaN/GaN heterostructure, K. Matsuo, N. Negoro, J. Kotani, T. Hashizume and H. Hasegawa 244 (2005) 273

GaN_xAs_{1-x}

An empirical potential approach to structural stability of GaN_xAs_{1-x} thin films on GaAs(1 1 1), T. Ito, T. Suda, T. Akiyama and K. Nakamura 244 (2005) 170

An empirical potential approach to dislocation formation and structural stability in GaN_xAs_{1-x}, K. Kawamoto, T. Suda, T. Akiyama, K. Nakamura and T. Ito 244 (2005) 182

Gas sensor

Pt Schottky diode gas sensors formed on GaN and AlGaN/GaN heterostructure, K. Matsuo, N. Negoro, J. Kotani, T. Hashizume and H. Hasegawa 244 (2005) 273

Chlorine gas sensors with high sensitivity using Mg-phthalocyanine thin films, T. Miyata and T. Minami 244 (2005) 563

Gd_2O_3

Incorporation of SiO_2 for the band alignment control of Gd_2O_3/n-GaAs(0 0 1) structure, J.-K. Yang and H.-H. Park 244 (2005) 293

Ge single crystal

2D lattice formation by YAG:Nd laser on the surface of Ge single crystal, A. Medvid, Y. Fukuda, A. Michko, P. Onufrievs and Y. Anma 244 (2005) 120

Formation of pores in Ge single crystal by laser radiation, A. Medvid', A. Mychko, A. Krivich and P. Onufrijevs 244 (2005) 203

GeSbTe thin film

In situ X-ray diffraction study of crystallization process of GeSbTe thin films during heat treatment, N. Kato, I. Konomi, Y. Seno and T. Motohiro 244 (2005) 281

Glancing incidence X-ray diffraction

Depth profiling of the strain distribution in the surface layer using X-ray diffraction at small glancing angle of incidence, Y. Fujii, E. Yanase and K. Arai 244 (2005) 230

Grain boundary

Effect of Mn coating materials of the nanopowders on phase transition of the nanograined $BaTiO_3$ ceramics, M.-B. Park and N.-H. Cho 244 (2005) 418

Control of chemical and electrical features near the grain boundary of the semiconducting $BaTiO_3$ oxides, M.-B. Park and N.-H. Cho 244 (2005) 422

(1 1 1)

Growth and characterization of P-doped CVD diamond (1 1 1) thin films homoepitaxially grown using trimethylphosphine, H. Wada, T. Teraji and T. Ito 244 (2005) 305

Hall effect

Investigation on transport properties of strained $La_{0.85}Ba_{0.15}MnO_3$ thin films using hall measurement, T. Kanki, T. Yanagida, B. Vilquin, H. Tanaka and T. Kawai 244 (2005) 481

Hard chromizing

Microstructures and mechanical properties evaluation of hard chromized austenitic Fe–Mn–Al alloys, J.-W. Lee 244 (2005) 248

Heavy-ion implantation

Optical effects in silica glass during implantation of 60 keV Cu^- ions, O.A. Plaksin, Y. Takeda, K. Kono, H. Amekura, N. Umeda and N. Kishimoto 244 (2005) 79

Helium implantation

Hydrogen and helium interactions in Si: phenomena obscure and not-so-obscure, S. Ashok 244 (2005) 2

$HfAlO_x$

Crystallization process of high-k gate dielectrics studied by surface X-ray diffraction, N. Terasawa, K. Akimoto, Y. Mizuno, A. Ichimiya, K. Sumitani, T. Takahashi, X.W. Zhang, H. Sugiyama, H. Kawata, T. Nabatame and A. Toriumi 244 (2005) 16

HfC

Photoemission spectroscopy study of the oxidation of HfC(1 0 0), K. Edamoto, Y. Shirotori, T. Sato and K. Ozawa 244 (2005) 174

HfO_2

Crystallization process of high-k gate dielectrics studied by surface X-ray diffraction, N. Terasawa, K. Akimoto, Y. Mizuno, A. Ichimiya, K. Sumitani, T. Takahashi, X.W. Zhang, H. Sugiyama, H. Kawata, T. Nabatame and A. Toriumi 244 (2005) 16

Influence of thickness of Hf buffer layer on the interfacial structures of sputtered HfO_2 on SiO_2/Si, R. Tan, Y. Azuma and I. Kojima 244 (2005) 21

Strain relaxation near high-k/Si interface by post-deposition annealing, T. Emoto, K. Akimoto, Y. Yoshida, A. Ichimiya, T. Nabatame and A. Toriumi 244 (2005) 55

High electric field

Electrical properties of diamond *p–i–p* structures at high electric fields, M. Yamamoto, T. Watanabe, M. Hamada, T. Teraji and T. Ito 244 (2005) 310

High rate deposition

Influence of substrate dc bias on crystallinity of silicon films grown at a high rate from inductively-coupled plasma CVD, N. Kosku, H. Murakami, S. Higashi and S. Miyazaki 244 (2005) 39

High saturation magnetization

Magnetic properties of $Fe_{70-x}Co_{30-y}N_{x+y}$ thin films, C.Y. Li and J.G. Duh 244 (2005) 477

High-k

Crystallization process of high-k gate dielectrics studied by surface X-ray diffraction, N. Terasawa, K. Akimoto, Y. Mizuno, A. Ichimiya, K. Sumitani, T. Takahashi, X.W. Zhang, H. Sugiyama, H. Kawata, T. Nabatame and A. Toriumi 244 (2005) 16

Strain relaxation near high-k/Si interface by post-deposition annealing, T. Emoto, K. Akimoto, Y. Yoshida, A. Ichimiya, T. Nabatame and A. Toriumi 244 (2005) 55

High-rate deposition

Formation of microcrystalline germanium (μc-Ge:H) films from inductively coupled plasma CVD, Y. Okamoto, K. Makihara, S. Higashi and S. Miyazaki 244 (2005) 12

Hot wall epitaxy

Zn_3N_2 compensated ZnTe films and ZnTe–ZnSe superlattices grown by hot wall epitaxy, S. Sakakibara, Y. Inoue, H. Mimura, K. Ishino, A. Ishida and H. Fujiyasu 244 (2005) 343

Hydration

Computational chemistry study of solid and aqueous solution interface, U. Mart, C. Jung, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 640

Hydrogen diffusivity

Development of new kinetic Monte Carlo simulator for hydrogen diffusion process in palladium–silver alloys, H. Kurokawa, K. Bada, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 636

Hydrogen in Si

Hydrogen and helium interactions in Si: phenomena obscure and not-so-obscure, S. Ashok 244 (2005) 2

Hydrogen termination

Theoretical study on hydrogen reaction processes on H/Si(0 0 1) surface, N. Takahashi, J. Nara, T. Uda, Y. Nakamura, Y. Tateyama and T. Ohno 244 (2005) 190

Hydrogen-defect interactions

Hydrogen and helium interactions in Si: phenomena obscure and not-so-obscure, S. Ashok 244 (2005) 2

β-Hydrogen-elimination

Density functional theory studies on decomposition of ethyl-palladium complexes: an important role of cationic species, R. Raharintsalama, H. Munakata, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 631

Hydrogen-terminated surface

Oxidization process of CVD diamond (1 0 0):H 2×1 surfaces, J. Nakamura and T. Ito 244 (2005) 301

Hydroxyl group

Periodic density functional and tight-binding quantum chemical molecular dynamics study of surface hydroxyl groups on ZrO_2(111)-supported Pt catalyst, C. Jung, M. Koyama, M. Kubo, A. Imamura and A. Miyamoto 244 (2005) 644

ICP

Formation of microcrystalline germanium (μc-Ge:H) films from inductively coupled plasma CVD, Y. Okamoto, K. Makihara, S. Higashi and S. Miyazaki 244 (2005) 12

III–V Semiconductors

High-resolution TEM characterization of MOVPE-grown (1 1 1)-BP layer on hexagonal 6H (0 0 0 1)-SiC, T. Udagawa, M. Odawara and G. Shimaoka 244 (2005) 285

III–V semiconductors

Morphological investigation of double positioning growth of (1 1 1)-boron phosphide (BP) on the (0 0 0 1)-GaN, M. Odawara, T. Udagawa and G. Shimaoka 244 (2005) 289

II–VI

Growth of ZnO and device applications, K. Iwata, H. Tampo, A. Yamada, P. Fons, K. Matsubara, K. Sakurai, S. Ishizuka and S. Niki 244 (2005) 504

Impact ionization

Impact ionization phenomenon in single-crystalline rutile TiO_2, H. Hashimoto, T. Teraji and T. Ito 244 (2005) 394

In situ optical transmission

Optical effects in silica glass during implantation of 60 keV Cu^- ions, O.A. Plaksin, Y. Takeda, K. Kono, H. Amekura, N. Umeda and N. Kishimoto 244 (2005) 79

InAs

Control of photoluminescence wavelength from uniform InAs quantum dots by annealing, Y. Kobayashi and K. Yamaguchi 244 (2005) 88

InAsSb/InAsPSb

Influence of Si_3N_4 and ZnS films on transmittance of InAsSb/InAsPSb heterostructures, Y.Z. Gao, X.Y. Gong, W.Z. Fang, H.Y. Deng, G.J. Hu, M. Aoyama, T. Yamaguchi and N. Dai 244 (2005) 297

Incoherent light

Spectroscopic ellipsometry on sinusoidal surface-relief gratings, R. Antos, I. Ohlidal, D. Franta, P. Klapetek, J. Mistrik, T. Yamaguchi and S. Visnovsky 244 (2005) 221

Indium

Sb adsorption onto In nanocluster array structure formed on a Si(1 1 1)–(7 × 7), M. Saito, C. Takeuchi, M. Mori, T. Tambo and C. Tatsuyama 244 (2005) 137

Indium oxide

Growth of In_2O_3 nanocrystal chains by a vapor transport and condensation method, C.L. Hsin, J.H. He and L.J. Chen 244 (2005) 101

Indium phosphide

Surface structure and electronic states of sulfur-treated InP(1 1 1)A studied by LEED, AES, STM, and IPES, M. Shimomura, Y. Sano, N. Sanada, L.L. Cao and Y. Fukuda 244 (2005) 153

Inductively-coupled plasma

Influence of substrate dc bias on crystallinity of silicon films grown at a high rate from inductively-coupled plasma CVD, N. Kosku, H. Murakami, S. Higashi and S. Miyazaki 244 (2005) 39

Infrared spectroscopy

Infrared spectroscopy of pentacene thin film on SiO_2 surface, Y. Hosoi, K. Okamura, Y. Kimura, H. Ishii and M. Niwano 244 (2005) 607

Insulating layer

Preparation of CaS:Cu,F thin-film electroluminescent devices with an emission including purple region, S. Hakamata, M. Ehara, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 469

Interdiffusion

Control of photoluminescence wavelength from uniform InAs quantum dots by annealing, Y. Kobayashi and K. Yamaguchi 244 (2005) 88

Interface defects

Structural defects in SiO_2/SiC interface probed by a slow positron beam, M. Maekawa, A. Kawasuso, Z.Q. Chen, M. Yoshikawa, R. Suzuki and T. Ohdaira 244 (2005) 322

Interface states

Local electronic and chemical structure at GaN, AlGaN and SiC heterointerfaces, L.J. Brillson, S.T. Bradley, S.H. Tumakha, S.H. Goss, X.L. Sun, R.S. Okojie, J. Hwang and W.J. Schaff 244 (2005) 257

HRTEM observation of interface states between ZnO epitaxial film and Si(1 1 1) substrate, Y. Nakanishi, A. Miyake, H. Tatsuoka, H. Kominami, H. Kuwabara and Y. Hatanaka 244 (2005) 359

Interfaces

Energy level alignment at interfaces with pentacene: metals versus conducting polymers, N. Koch, A. Elschner, R.L. Johnson and J.P. Rabe 244 (2005) 593

Interfacial layer

Strain relaxation near high-k/Si interface by post-deposition annealing, T. Emoto, K. Akimoto, Y. Yoshida, A. Ichimiya, T. Nabatame and A. Toriumi 244 (2005) 55

Interfacial reaction

Photoemission study on interfacial reaction of Ti/n-type GaN, T. Naono, J. Okabayashi, S. Toyoda, H. Fujioka, M. Oshima and H. Hamamatsu 244 (2005) 277

Interference

Microcavity effects and the outcoupling of light in displays and lighting applications based on thin emitting films, K. Neyts 244 (2005) 517

Inverse photoemission spectroscopy

Surface structure and electronic states of sulfur-treated InP(1 1 1)A studied by LEED, AES, STM, and IPES, M. Shimomura, Y. Sano, N. Sanada, L.L. Cao and Y. Fukuda 244 (2005) 153

Ion plating

Evidence of refractive index change in glass substrates induced by high-density reactive ion plating deposition of SiO_2 films, J. Mistrik, I. Ohlidal, R. Antos, M. Aoyama and T. Yamaguchi 244 (2005) 51

Ionic conductor

Nano-scale Cu metal patterning by using an atomic force microscope, Y. Tomita, Y. Hasegawa and K. Kobayashi 244 (2005) 107

Ion-induced photon emission

Optical effects in silica glass during implantation of 60 keV Cu^- ions, O.A. Plaksin, Y. Takeda, K. Kono, H. Amekura, N. Umeda and N. Kishimoto 244 (2005) 79

Ionization energy

Enhancement of donor ionization in phosphorus-doped n-diamond, Y. Koide 244 (2005) 26

Islanding transition

Surface elemental segregation and the Stranski–Krastanow epitaxial islanding transition, A.G. Cullis, D.J. Norris, M.A. Migliorato and M. Hopkinson 244 (2005) 65

ITO

Effect of ITO surface state to the aging characteristics of thin film OLED, Y. Fukushi, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 537

Study of thin films of carrier-doped strontium titanate with emphasis on their interfaces with organic thin films, N. Sato, Y. Harada, T. Terashima, R. Kanda and M. Takano 244 (2005) 588

ITO/SnO_2 substrate

Improvement in the light emission characteristics of CdS:Cu/CdS diodes, H. Murai, T. Abe, J. Matsuda, H. Sato, S. Chiba and Y. Kashiwaba 244 (2005) 351

Jet

Preparation and characterization of Rhodamine B and Alq_3 thin films deposited by solution jet beam method, Y. Okabayashi, T. Mitarai, S. Yamazaki, R. Matsuyama, K. Kanai, Y. Ouchi and K. Seki 244 (2005) 217

KFM

Diffusion of Li in the silicon oxide films and evaluation of Li-induced surface potential, M. Maeda, T. Watanabe, Y. Imai, Y. Ishikawa and M. Tabe 244 (2005) 61

Kinetic Monte Carlo method

Development of new kinetic Monte Carlo simulator for hydrogen diffusion process in palladium–silver alloys, H. Kurokawa, K. Bada, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 636

$LaNiO_3$

Optical properties of rough $LaNiO_3$ thin films studied by spectroscopic ellipsometry and reflectometry, J. Mistrik, T. Yamaguchi, D. Franta, I. Ohlidal, G.J. Hu and N. Dai 244 (2005) 431

Large-scale calculation

Large-scale calculations of solid oxide fuel cell cermet anode by tight-binding quantum chemistry method, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 598

Laser doping

Sb excimer-laser doping in ZnO films prepared by oxidation of sulfide on Si, K. Ohara, T. Seino, A. Nakamura, T. Aoki, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 369

Laser irradiation

Metal–semiconductor interfaces in CdTe crystals and modification of their properties by laser pulses, V.A. Gnatyuk, T. Aoki, Y. Hatanaka and O.I. Vlasenko 244 (2005) 528

Laser radiation

Formation of pores in Ge single crystal by laser radiation, A. Medvid', A. Mychko, A. Krivich and P. Onufrijevs 244 (2005) 203

Lattice vacancy

Tight-binding quantum chemical molecular dynamics simulation of boron activation process in crystalline silicon, T. Masuda, K. Sasata, M. Elanany, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 30

Li diffusion

Diffusion of Li in the silicon oxide films and evaluation of Li-induced surface potential, M. Maeda, T. Watanabe, Y. Imai, Y. Ishikawa and M. Tabe 244 (2005) 61

Light emitting diode

Improvement in the light emission characteristics of CdS:Cu/CdS diodes, H. Murai, T. Abe, J. Matsuda, H. Sato, S. Chiba and Y. Kashiwaba 244 (2005) 351

Light outcoupling

Microcavity effects and the outcoupling of light in displays and lighting applications based on thin emitting films, K. Neyts 244 (2005) 517

Lithography

Nano-photocatalytic decomposition of a stearic acid film deposited on the TiO_2 by an atomic force microscope, K. Kobayashi, Y. Tomita, K. Matsuhisa and Y. Doi 244 (2005) 389

LNO

Optical properties of rough $LaNiO_3$ thin films studied by spectroscopic ellipsometry and reflectometry, J. Mistrik, T. Yamaguchi, D. Franta, I. Ohlidal, G.J. Hu and N. Dai 244 (2005) 431

Low-k

Electrical and mechanical properties of surfactant-templated mesoporous silica thin films using Brij-76 surfactant, S.-B. Jung, C.-K. Han and H.-H. Park 244 (2005) 47

Low-energy electron diffraction

Surface structure and electronic states of sulfur-treated InP(1 1 1)A studied by LEED, AES, STM, and IPES, M. Shimomura, Y. Sano, N. Sanada, L.L. Cao and Y. Fukuda 244 (2005) 153

Low-temperature CVD

Transparent ultra water-repellent poly(ethylene terephthalate) substrates fabricated by oxygen plasma treatment and subsequent hydrophobic coating, K. Teshima, H. Sugimura, Y. Inoue, O. Takai and A. Takano 244 (2005) 619

LPCVD

Control of the nucleation density of Si quantum dots by remote hydrogen plasma treatment, K. Makihara, H. Deki, H. Murakami, S. Higashi and S. Miyazaki 244 (2005) 75

Luminescence

Optical and structural properties of CVD-grown single crystal SiO_2 using optically detected XAS, T. Nakamura, N. Takahashi, N.R.J. Poolton and A.E.R. Malins 244 (2005) 318

Magnetic and transport properties

Transport and magnetic properties of Ce-doped $LaMnO_3$ thin films, T. Yanagida, T. Kanki, B. Vilquin, H. Tanaka and T. Kawai 244 (2005) 355

Investigation on transport properties of strained $La_{0.85}Ba_{0.15}MnO_3$ thin films using hall measurement, T. Kanki, T. Yanagida, B. Vilquin, H. Tanaka and T. Kawai 244 (2005) 481

Magnetic domain wall

Magnetic domain wall structures in free-standing Fe(1 1 0) monolayers, Y. Takeda, K. Nakamura, T. Akiyama and T. Ito 244 (2005) 485

Magnetic force microscopy

Domain structures of nanocrystalline $Fe_{78}Si_{10}B_{12}$ thin films, Z.G. Sun, H. Kuramochi and H. Akinaga 244 (2005) 489

Magnetoconcentration effect

Formation of pores in Ge single crystal by laser radiation, A. Medvid', A. Mychko, A. Krivich and P. Onufrijevs 244 (2005) 203

Magnetostriction

Domain structures of nanocrystalline $Fe_{78}Si_{10}B_{12}$ thin films, Z.G. Sun, H. Kuramochi and H. Akinaga 244 (2005) 489

Manganites

Transport and magnetic properties of Ce-doped $LaMnO_3$ thin films, T. Yanagida, T. Kanki, B. Vilquin, H. Tanaka and T. Kawai 244 (2005) 355

Investigation on transport properties of strained $La_{0.85}Ba_{0.15}MnO_3$ thin films using hall measurement, T. Kanki, T. Yanagida, B. Vilquin, H. Tanaka and T. Kawai 244 (2005) 481

MBE

Growth of ZnO and device applications, K. Iwata, H. Tampo, A. Yamada, P. Fons, K. Matsubara, K. Sakurai, S. Ishizuka and S. Niki 244 (2005) 504

Mechano-chemical reaction

Tight-binding quantum chemical molecular dynamics simulation of mechano-chemical reactions during chemical–mechanical polishing process of SiO_2 surface by CeO_2 particle, A. Rajendran, Y. Takahashi, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 34

Mercaptoalcohol

Structure of mercaptoalcohol self-assembled monolayers on Au(1 1 1), K. Tsukamoto, T. Kubo and H. Nozoye 244 (2005) 578

Mesoporous silica films

Electrical and mechanical properties of surfactant-templated mesoporous silica thin films using Brij-76 surfactant, S.-B. Jung, C.-K. Han and H.-H. Park 244 (2005) 47

Metal nanoparticles

Optical effects in silica glass during implantation of 60 keV Cu^- ions, O.A. Plaksin, Y. Takeda, K. Kono, H. Amekura, N. Umeda and N. Kishimoto 244 (2005) 79

Metal patterning

Nano-scale Cu metal patterning by using an atomic force microscope, Y. Tomita, Y. Hasegawa and K. Kobayashi 244 (2005) 107

Metal–insulator transition

Transport and magnetic properties of Ce-doped $LaMnO_3$ thin films, T. Yanagida, T. Kanki, B. Vilquin, H. Tanaka and T. Kawai 244 (2005) 355

Metalorganic chemical vapor deposition

High-resolution TEM characterization of MOVPE-grown (1 1 1)-BP layer on hexagonal 6H (0 0 0 1)-SiC, T. Udagawa, M. Odawara and G. Shimaoka 244 (2005) 285

Morphological investigation of double positioning growth of (1 1 1)-boron phosphide (BP) on the (0 0 0 1)-GaN, M. Odawara, T. Udagawa and G. Shimaoka 244 (2005) 289

Metal-organic semiconductor interfaces

Unoccupied electronic band structure of conjugated molecular films interfacing polycrystalline gold surface, A. Komolov and P.J. Møller 244 (2005) 573

MgPc

Chlorine gas sensors with high sensitivity using Mg-phthalocyanine thin films, T. Miyata and T. Minami 244 (2005) 563

$Mg_xZn_{1-x}O$

Growth of $Mg_xZn_{1-x}O$ films using remote plasma MOCVD, A. Nakamura, J. Ishihara, S. Shigemori, T. Aoki and J. Temmyo 244 (2005) 385

Microcavity

Microcavity effects and the outcoupling of light in displays and lighting applications based on thin emitting films, K. Neyts 244 (2005) 517

Microcrystalline silicon

Influence of substrate dc bias on crystallinity of silicon films grown at a high rate from inductively-coupled plasma CVD, N. Kosku, H. Murakami, S. Higashi and S. Miyazaki 244 (2005) 39

Microstructure

Influence of reacting nitrogen gas consistence on the properties of TiN films prepared by rf. magnetron sputtering, Y. Pihosh, M. Goto, A. Kasahara, T. Oishi and M. Tosa 244 (2005) 244

Microwave plasma

Characterization of amorphous carbon film-coated nanotubes as electron field emission material, M. Nagatsu, T. Yoshida, S. Kurita and K. Murakami 244 (2005) 111

Migration

An ab initio-based approach to Ga adatom migration on GaAs(n 1 1)A–(0 0 1) non-planar surfaces, T. Ito, K. Asano, T. Akiyama, K. Nakamura, K. Shiraishi and A. Taguchi 244 (2005) 178

Molecular beam epitaxy

An ab initio-based approach to Ga adatom migration on GaAs(n 1 1)A–(0 0 1) non-planar surfaces, T. Ito, K. Asano, T. Akiyama, K. Nakamura, K. Shiraishi and A. Taguchi 244 (2005) 178

Control of photoluminescence wavelength from uniform InAs quantum dots by annealing, Y. Kobayashi and K. Yamaguchi 244 (2005) 88

Molecular dynamics

Computational chemistry study of solid and aqueous solution interface, U. Mart, C. Jung, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 640

Molybdenum

Reactivity between molybdenum and TiO_2(1 1 0) surfaces: evidence of a sub-monolayer mode and a multilayer mode, B. Domenichini, P. Krüger, A. Brevet, S. Bourgeois, Z. Li and P.J. Møller 244 (2005) 403

Monovalent metal ion

Computational chemistry study of solid and aqueous solution interface, U. Mart, C. Jung, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 640

MOS

Incorporation of SiO_2 for the band alignment control of Gd_2O_3/n-GaAs(0 0 1) structure, J.-K. Yang and H.-H. Park 244 (2005) 293

MOS cathode

Emission characteristics and application of semiconductor field emitters, H. Mimura, Y. Neo, H. Shimawaki, T. Matsumoto and K. Yokoo 244 (2005) 498

Mott insulator

Effect of Sr doping on $LaTiO_3$ thin films, B. Vilquin, T. Kanki, T. Yanagida, H. Tanaka and T. Kawai 244 (2005) 494

MOVPE

Control of Zn composition ($0 < x < 1$) in $Cd_{1-x}Zn_xTe$ epitaxial layers on GaAs substrates grown by MOVPE, K. Yasuda, M. Niraula, H. Kusama, Y. Yamamoto, M. Tominaga, K. Takagi and Y. Aagata 244 (2005) 347

Nanocavities

Hydrogen and helium interactions in Si: phenomena obscure and not-so-obscure, S. Ashok 244 (2005) 2

Nanocomb

Growth of ZnS nanocombs with ZnO sheath by thermal evaporation, M.Y. Lu, P.Y. Su, Y.L. Chueh, L.J. Chen and L.J. Chou 244 (2005) 96

Nanocrystal chains

Growth of In_2O_3 nanocrystal chains by a vapor transport and condensation method, C.L. Hsin, J.H. He and L.J. Chen 244 (2005) 101

Nanocrystalline

Nanocrystalline WO_3 films prepared by two-step annealing, A.H. Jayatissa, A. Dadi and T. Aoki 244 (2005) 453

Nanocrystalline materials

Domain structures of nanocrystalline $Fe_{78}Si_{10}B_{12}$ thin films, Z.G. Sun, H. Kuramochi and H. Akinaga 244 (2005) 489

Nanocrystals

Changes in the electronic energy structure of CdSe nanocrystals of close-packed array by in situ anneal, H.-J. Choi, J.-K. Yang, S. Yoon and H.-H. Park 244 (2005) 92

Novel green thin-film electroluminescent devices utilizing ZnS nanocrystals doped with Tb compounds, T. Toyama, K. Yoshimura, M. Fujii, H. Haze and H. Okamoto 244 (2005) 524

Characterization on thermal stability of $ZnS:Mn^{2+}/MPS/SiO_2$ nano-phosphor film, H. Kubo, T. Isobe, H. Takahashi and S. Itoh 244 (2005) 465

Nano-fabrication

Nano-scale Cu metal patterning by using an atomic force microscope, Y. Tomita, Y. Hasegawa and K. Kobayashi 244 (2005) 107

Nano-grained ceramics

Effect of Mn coating materials of the nano-powders on phase transition of the nano-grained $BaTiO_3$ ceramics, M.-B. Park and N.-H. Cho 244 (2005) 418

Nanolines

The geometry of Bi nanolines on Si(0 0 1), R.H. Miwa, J.M. MacLeod, G.P. Srivastava and A.B. McLean 244 (2005) 157

Nanoparticles

Determination of interface roughness of Gd films deposited on Si surface using improved wavelet transform of X-ray reflectivity data, O. Starykov and K. Sakurai 244 (2005) 235

Nano-phosphor

Characterization on thermal stability of $ZnS:Mn^{2+}/MPS/SiO_2$ nano-phosphor film, H. Kubo, T. Isobe, H. Takahashi and S. Itoh 244 (2005) 465

Nanostructures

Fabrication of organic static induction transistors with higher order structures, J.C. Mathew, N. Hirashima, M. Nakamura, M. Iizuka and K. Kudo 244 (2005) 603

Nanotube

Characterization of amorphous carbon film-coated nanotubes as electron field emission material, M. Nagatsu, T. Yoshida, S. Kurita and K. Murakami 244 (2005) 111

Nanowires

Growth of In_2O_3 nanocrystal chains by a vapor transport and condensation method, C.L. Hsin, J.H. He and L.J. Chen 244 (2005) 101

Vacancy ordering in self-assembled erbium silicide nanowires on atomically clean Si(0 0 1), W.C. Tsai, H.C. Hsu, H.F. Hsu and L.J. Chen 244 (2005) 115

NEXAFS

Chain length dependence of adsorption structure of COOH-terminated alkanethiol SAMs on Au(1 1 1), E. Ito, K. Konno, J. Noh, K. Kanai, Y. Ouchi, K. Seki and M. Hara 244 (2005) 584

Ni/CeO_2

Large-scale calculations of solid oxide fuel cell cermet anode by tight-binding quantum chemistry method, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 598

NiO films

Optical properties of NiO thin films prepared by pulsed laser deposition technique, D. Franta, B. Negulescu, L. Thomas, P.R. Dahoo, M. Guyot, I. Ohlídal, J. Mistrík and T. Yamaguchi 244 (2005) 426

Nitriding

Corrosion and cell adhesion behavior of TiN-coated and ion-nitrided titanium for dental applications, H.-H. Huang, C.-H. Hsu, S.-J. Pan, J.-L. He, C.-C. Chen and T.-L. Lee 244 (2005) 252

Nitrogen

Inclined N_2 desorption in N_2O decomposition on Rh(1 1 0), T. Matsushima, K. Imamura, H. Horino, A. Hiratsuka, Y.-S. Ma, I.I. Rzeznicka and O. Nakagoe 244 (2005) 141

Separation of nitrogen removal pathways in a steady-state NO + CO reaction on Pd(1 1 0): an angle-resolved desorption study, Y.-S. Ma, I.I. Rzeznicka and T. Matsushima 244 (2005) 558

Nitrogen oxide

Separation of nitrogen removal pathways in a steady-state NO + CO reaction on Pd(1 1 0): an angle-resolved desorption study, Y.-S. Ma, I.I. Rzeznicka and T. Matsushima 244 (2005) 558

Nitrous oxide

Inclined N_2 desorption in N_2O decomposition on Rh(1 1 0), T. Matsushima, K. Imamura, H. Horino, A. Hiratsuka, Y.-S. Ma, I.I. Rzeznicka and O. Nakagoe 244 (2005) 141

Separation of nitrogen removal pathways in a steady-state NO + CO reaction on Pd(1 1 0): an angle-resolved desorption study, Y.-S. Ma, I.I. Rzeznicka and T. Matsushima 244 (2005) 558

n-Type

Enhancement of donor ionization in phosphorus-doped n-diamond, Y. Koide 244 (2005) 26

Growth and characterization of P-doped CVD diamond (1 1 1) thin films homoepitaxially grown using trimethylphosphine, H. Wada, T. Teraji and T. Ito 244 (2005) 305

Nuclear detector

Metal–semiconductor interfaces in CdTe crystals and modification of their properties by laser pulses, V.A. Gnatyuk, T. Aoki, Y. Hatanaka and O.I. Vlasenko 244 (2005) 528

Oblique deposition

Obliquely deposited metal films for polarizers, Y. Takeda, N. Takeuchi, T. Fukano and T. Motohiro 244 (2005) 209

OD-XAS

Optical and structural properties of CVD-grown single crystal SiO_2 using optically detected XAS, T. Nakamura, N. Takahashi, N.R.J. Poolton and A.E.R. Malins 244 (2005) 318

Ohmic contact

Photoemission study on interfacial reaction of Ti/n-type GaN, T. Naono, J. Okabayashi, S. Toyoda, H. Fujioka, M. Oshima and H. Hamamatsu 244 (2005) 277

OLED

Microcavity effects and the outcoupling of light in displays and lighting applications based on thin emitting films, K. Neyts 244 (2005) 517

Study of thin films of carrier-doped strontium titanate with emphasis on their interfaces with organic thin films, N. Sato, Y. Harada, T. Terashima, R. Kanda and M. Takano 244 (2005) 588

Optical band gap

Structural and compositional characterization of N_2–H_2 plasma surface-treated TiO_2 thin films, L. Miao, S. Tanemura, H. Watanabe, S. Toh and K. Kaneko 244 (2005) 412

Optical constants

Optical characterization of sol–gel deposited PZT thin films by spectroscopic ellipsometry and reflectometry in near-UV and visible regions, D. Franta, I. Ohlídal, J. Mistrík, T. Yamaguchi, G.J. Hu and N. Dai 244 (2005) 338

Optical properties of NiO thin films prepared by pulsed laser deposition technique, D. Franta, B. Negulescu, L. Thomas, P.R. Dahoo, M. Guyot, I. Ohlídal, J. Mistrík and T. Yamaguchi 244 (2005) 426

Optical properties of rough $LaNiO_3$ thin films studied by spectroscopic ellipsometry and reflectometry, J. Mistrik, T. Yamaguchi, D. Franta, I. Ohlidal, G.J. Hu and N. Dai 244 (2005) 431

Optical design

Thickness dependence of optical properties of VO_2 thin films epitaxially grown on sapphire (0 0 0 1), G. Xu, P. Jin, M. Tazawa and K. Yoshimura 244 (2005) 449

Optical fiber

Measurements of critical micelle concentration (CMC) using optical fiber covered with porous sol–gel cladding, H. Isobe, C.D. Singh, H. Katsumata, H. Suzuki, T. Fujinami and M. Ogita 244 (2005) 199

Optical metrology

Spectroscopic ellipsometry on sinusoidal surface-relief gratings, R. Antos, I. Ohlidal, D. Franta, P. Klapetek, J. Mistrik, T. Yamaguchi and S. Visnovsky 244 (2005) 221

Spectroscopic ellipsometry on lamellar gratings, R. Antos, I. Ohlidal, J. Mistrik, K. Murakami, T. Yamaguchi, J. Pistora, M. Horie and S. Visnovsky 244 (2005) 225

Optical microcavities

Atomic layer deposition in porous structures: 3D photonic crystals, J.S. King, D. Heineman, E. Graugnard and C.J. Summers 244 (2005) 511

Optoelectronic devices

Control of Zn composition ($0 < x < 1$) in $Cd_{1-x}Zn_xTe$ epitaxial layers on GaAs substrates grown by MOVPE, K. Yasuda, M. Niraula, H. Kusama, Y. Yamamoto, M. Tominaga, K. Takagi and Y. Aagata 244 (2005) 347

Ordered

Electrical and mechanical properties of surfactant-templated mesoporous silica thin films using Brij-76 surfactant, S.-B. Jung, C.-K. Han and H.-H. Park 244 (2005) 47

Organic light emitting diode

Effect of ITO surface state to the aging characteristics of thin film OLED, Y. Fukushi, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 537

Organic semiconductors

Energy level alignment at interfaces with pentacene: metals versus conducting polymers, N. Koch, A. Elschner, R.L. Johnson and J.P. Rabe 244 (2005) 593

Organic thin film

Preparation and characterization of Rhodamine B and Alq_3 thin films deposited by solution jet beam method, Y. Okabayashi, T. Mitarai, S. Yamazaki, R. Matsuyama, K. Kanai, Y. Ouchi and K. Seki 244 (2005) 217

Organic transistors

Fabrication of organic static induction transistors with higher order structures, J.C. Mathew, N. Hirashima, M. Nakamura, M. Iizuka and K. Kudo 244 (2005) 603

Organosilane precursor

Transparent ultra water-repellent poly(ethylene terephthalate) substrates fabricated by oxygen plasma treatment and subsequent hydrophobic coating, K. Teshima, H. Sugimura, Y. Inoue, O. Takai and A. Takano 244 (2005) 619

Oxidation

Photoemission spectroscopy study of the oxidation of HfC(1 0 0), K. Edamoto, Y. Shirotori, T. Sato and K. Ozawa 244 (2005) 174

Oxide nanoskin

Chemical properties of an oxide nanoskin on a polymeric surface, A. Hozumi and N. Shirahata 244 (2005) 334

Oxides

Computational chemistry study of solid and aqueous solution interface, U. Mart, C. Jung, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 640

(1 0 0)

Oxidization process of CVD diamond (1 0 0):H 2×1 surfaces, J. Nakamura and T. Ito 244 (2005) 301

Oxygen deficiency

Photoresponse of surface oxygen defects on TiO_2(1 1 0), M. Komiyama and Y.-J. Li 244 (2005) 550

Oxygen impurity

Characterisation of amorphous GaN films, J.B. Metson, B.J. Ruck, F. Budde, H.J. Trodahl, A. Bittar and K.E. Prince 244 (2005) 264

Oxygen plasma treatment

Transparent ultra water-repellent poly(ethylene terephthalate) substrates fabricated by oxygen plasma treatment and subsequent hydrophobic coating, K. Teshima, H. Sugimura, Y. Inoue, O. Takai and A. Takano 244 (2005) 619

Oxygen stoichiometry

Electrical characteristics of V_2O_5 thin films formed on p-Si by sputter-deposition and rapid thermal annealing, M.H. Yoon and S. Im 244 (2005) 444

Oxygen-terminated surface

Oxidization process of CVD diamond (1 0 0):H 2×1 surfaces, J. Nakamura and T. Ito 244 (2005) 301

Palladium

Separation of nitrogen removal pathways in a steady-state NO + CO reaction on Pd(1 1 0): an angle-resolved desorption study, Y.-S. Ma, I.I. Rzeznicka and T. Matsushima 244 (2005) 558

Palladium–silver alloys

Development of new kinetic Monte Carlo simulator for hydrogen diffusion process in palladium–silver alloys, H. Kurokawa, K. Bada, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 636

Pentacene

Infrared spectroscopy of pentacene thin film on SiO_2 surface, Y. Hosoi, K. Okamura, Y. Kimura, H. Ishii and M. Niwano 244 (2005) 607

6,13-Pentacenequinone film

Structural and optical properties of 6,13-pentacenequinone film, D.K. Hwang, K. Kim, J.H. Kim, D.-Y. Jung, E. Kim and S. Im 244 (2005) 615

Periodic density functional theory

Theoretical study on the electronic and molecular properties of ground and excited states of ethylenedioxythiophene and styrenesulphonic acid, G. Agalya, C. Lv, X. Wang, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 195

Periodic density functional and tight-binding quantum chemical molecular dynamics study of surface hydroxyl groups on ZrO_2(111)-supported Pt catalyst, C. Jung, M. Koyama, M. Kubo, A. Imamura and A. Miyamoto 244 (2005) 644

Phase field model

Modelling of columnar growth in continuum ballistic deposition, Y. Enomoto and M. Taguchi 244 (2005) 213

Phase transition

Effect of Mn coating materials of the nanopowders on phase transition of the nanograined $BaTiO_3$ ceramics, M.-B. Park and N.-H. Cho 244 (2005) 418

Phase-change

In situ X-ray diffraction study of crystallization process of GeSbTe thin films during heat treatment, N. Kato, I. Konomi, Y. Seno and T. Motohiro 244 (2005) 281

Phosphor

Study of active surface centers in electroluminescent ZnS:Cu,Cl phosphors, M.M. Sychov, S.V. Mjakin, Y. Nakanishi, V.G. Korsakov, I.V. Vasiljeva, V.V. Bakhmetjev, O.V. Solovjeva and E.V. Komarov 244 (2005) 461

Luminescent properties of $SrGa_2S_4$:Eu thin film phosphors deposited by two electron beam evaporation, Y. Arai, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 473

Effects of Zn-doping on red-luminescence in Eu-doped (Mg,Ca)S phosphor films, S. Tokunaga and A. Mikami 244 (2005) 533

Growth and characterization of P-doped CVD diamond (1 1 1) thin films homoepitaxially

grown using trimethylphosphine, H. Wada, T. Teraji and T. Ito 244 (2005) 305

Phosphorus donor

Enhancement of donor ionization in phosphorus-doped n-diamond, Y. Koide 244 (2005) 26

Photocatalysis

Nano-photocatalytic decomposition of a stearic acid film deposited on the TiO_2 by an atomic force microscope, K. Kobayashi, Y. Tomita, K. Matsuhisa and Y. Doi 244 (2005) 389
Impact ionization phenomenon in single-crystalline rutile TiO_2, H. Hashimoto, T. Teraji and T. Ito 244 (2005) 394

Photocatalytic activity

Photocatalytic characteristics of hydro-oxygenated amorphous titanium oxide films prepared using remote plasma enhanced chemical vapor deposition, Y. Hatanaka[a], H. Naito[b], S. Itou[c] and M. Kando[b] 244 (2005) 554

Photocatalytic reaction dynamics

Photocatalytic oxidation dynamics of acetone on TiO_2: tight-binding quantum chemical molecular dynamics study, C. Lv, X. Wang, G. Agalya, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 541

Photoconductivity

Photocatalytic characteristics of hydro-oxygenated amorphous titanium oxide films prepared using remote plasma enhanced chemical vapor deposition, Y. Hatanaka[a], H. Naito[b], S. Itou[c] and M. Kando[b] 244 (2005) 554

Photocurrent decay

Photocatalytic chemisorption of water on titanium dioxide thin films obtained by radio frequency magnetron deposition, L. Sirghi, Y. Hatanaka and T. Aoki 244 (2005) 408

Photodiode

Ultraviolet enhanced Si-photodetector using p-NiO films, J.-M. Choi and S. Im 244 (2005) 435

Photoelectron spectroscopy

Photoemission spectroscopy study of the oxidation of HfC(1 0 0), K. Edamoto, Y. Shirotori, T. Sato and K. Ozawa 244 (2005) 174
Energy level alignment at interfaces with pentacene: metals versus conducting polymers, N. Koch, A. Elschner, R.L. Johnson and J.P. Rabe 244 (2005) 593

Photoemission

Titanium dioxide surface stoichiometry and ordering studied by resonant photoemission spectroscopy, S. Bourgeois, B. Domenichini, Z. Li and P.J. Møller 244 (2005) 399
Reactivity between molybdenum and TiO_2(1 1 0) surfaces: evidence of a submonolayer mode and a multilayer mode, B. Domenichini, P. Krüger, A. Brevet, S. Bourgeois, Z. Li and P.J. Møller 244 (2005) 403

Photoemission spectroscopy

Photoemission study on interfacial reaction of Ti/n-type GaN, T. Naono, J. Okabayashi, S. Toyoda, H. Fujioka, M. Oshima and H. Hamamatsu 244 (2005) 277

Photoexcitation

Photoresponse of surface oxygen defects on TiO_2(1 1 0), M. Komiyama and Y.-J. Li 244 (2005) 550

Photoluminescence

Surface-related reduction of photoluminescence in GaAs quantum wires and its recovery by new passivation, N. Shiozaki, S. Anantathanasarn, T. Sato, T. Hashizume and H. Hasegawa 244 (2005) 71
Control of photoluminescence wavelength from uniform InAs quantum dots by annealing, Y. Kobayashi and K. Yamaguchi 244 (2005) 88
HRTEM observation of interface states between ZnO epitaxial film and Si(1 1 1) substrate, Y. Nakanishi, A. Miyake, H. Tatsuoka, H. Kominami, H. Kuwabara and Y. Hatanaka 244 (2005) 359
Atomic layer deposition in porous structures: 3D photonic crystals, J.S. King, D. Heineman, E. Graugnard and C.J. Summers 244 (2005) 511
Effects of Zn-doping on red-luminescence in Eu-doped (Mg,Ca)S phosphor films, S. Tokunaga and A. Mikami 244 (2005) 533

Structural and optical properties of 6,13-pentacenequinone film, D.K. Hwang, K. Kim, J.H. Kim, D.-Y. Jung, E. Kim and S. Im 244 (2005) 615

Photonic band gap properties

Atomic layer deposition in porous structures: 3D photonic crystals, J.S. King, D. Heineman, E. Graugnard and C.J. Summers 244 (2005) 511

Photo-responsivity

Ultraviolet enhanced Si-photodetector using p-NiO films, J.-M. Choi and S. Im 244 (2005) 435

Photothermal processes

Preparation and properties of bovine serum albumin thin films by pulsed laser deposition, J. Sagawa, S. Nagare and M. Senna 244 (2005) 611

Photovoltaic

Effect of AZO film deposition conditions on the photovoltaic properties of AZO–Cu_2O heterojunctions, H. Tanaka, T. Shimakawa, T. Miyata, H. Sato and T. Minami 244 (2005) 568

Piezoelectric

Deposition and structural properties of piezoelectric ZnO epitaxial film on p-InP (1 0 0) substrate for FBAR, J.J. Lee, Y.B. Kim and Y.S. Yoon 244 (2005) 365

PL

Preparation of CaS:Cu,F thin-film electroluminescent devices with an emission including purple region, S. Hakamata, M. Ehara, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 469

Plasma CVD

Characterization of amorphous carbon film-coated nanotubes as electron field emission material, M. Nagatsu, T. Yoshida, S. Kurita and K. Murakami 244 (2005) 111

Plasma processing

Formation of wide and narrow optical-band-gap amorphous-CN_x:H films using i-C_4H_{10}/N_2 supermagnetron plasma, H. Kinoshita, R. Ikuta and K. Sakurai 244 (2005) 314

Plasma treatment

Control of the nucleation density of Si quantum dots by remote hydrogen plasma treatment, K. Makihara, H. Deki, H. Murakami, S. Higashi and S. Miyazaki 244 (2005) 75

Plasma-assisted deposition

Evidence of refractive index change in glass substrates induced by high-density reactive ion plating deposition of SiO_2 films, J. Mistrik, I. Ohlidal, R. Antos, M. Aoyama and T. Yamaguchi 244 (2005) 51

Plasma-enhanced CVD

Transparent ultra water-repellent poly(ethylene terephthalate) substrates fabricated by oxygen plasma treatment and subsequent hydrophobic coating, K. Teshima, H. Sugimura, Y. Inoue, O. Takai and A. Takano 244 (2005) 619

Plasma-treated

Structural and compositional characterization of N_2–H_2 plasma surface-treated TiO_2 thin films, L. Miao, S. Tanemura, H. Watanabe, S. Toh and K. Kaneko 244 (2005) 412

Polarizer

Obliquely deposited metal films for polarizers, Y. Takeda, N. Takeuchi, T. Fukano and T. Motohiro 244 (2005) 209

Polycrystalline Si

A new crystallization technique of Si films on glass substrate using thermal plasma jet, H. Kaku, S. Higashi, H. Taniguchi, H. Murakami and S. Miyazaki 244 (2005) 8

Polyimide

Chemical properties of an oxide nanoskin on a polymeric surface, A. Hozumi and N. Shirahata 244 (2005) 334

Pores

Formation of pores in Ge single crystal by laser radiation, A. Medvid', A. Mychko, A. Krivich and P. Onufrijevs 244 (2005) 203

Positron annihilation spectroscopy

Structural defects in SiO_2/SiC interface probed by a slow positron beam, M. Maekawa, A. Kawasuso, Z.Q. Chen, M. Yoshikawa, R. Suzuki and T. Ohdaira 244 (2005) 322

Post treatment

The secondary structure control of silk fibroin thin films by post treatment, I. Taketani, S. Nakayama, S. Nagare and M. Senna 244 (2005) 623

Post-deposition anneal

Strain relaxation near high-k/Si interface by post-deposition annealing, T. Emoto, K. Akimoto, Y. Yoshida, A. Ichimiya, T. Nabatame and A. Toriumi 244 (2005) 55

Post-growth annealing

Control of photoluminescence wavelength from uniform InAs quantum dots by annealing, Y. Kobayashi and K. Yamaguchi 244 (2005) 88

Potential barrier height

Control of chemical and electrical features near the grain boundary of the semiconducting $BaTiO_3$ oxides, M.-B. Park and N.-H. Cho 244 (2005) 422

Primary structure

Preparation and properties of bovine serum albumin thin films by pulsed laser deposition, J. Sagawa, S. Nagare and M. Senna 244 (2005) 611

Protein

Electronic-state control of amino acids on semiconductor surfaces, M. Oda and T. Nakayama 244 (2005) 627

Pseudopotential method

Atomic-scale theoretical investigations of compound semiconductor surfaces, G.P. Srivastava 244 (2005) 129

Pt

Pt Schottky diode gas sensors formed on GaN and AlGaN/GaN heterostructure, K. Matsuo, N. Negoro, J. Kotani, T. Hashizume and H. Hasegawa 244 (2005) 273

Periodic density functional and tight-binding quantum chemical molecular dynamics study of surface hydroxyl groups on ZrO_2(111)-supported Pt catalyst, C. Jung, M. Koyama, M. Kubo, A. Imamura and A. Miyamoto 244 (2005) 644

p-Type

Improvement in the light emission characteristics of CdS:Cu/CdS diodes, H. Murai, T. Abe, J. Matsuda, H. Sato, S. Chiba and Y. Kashiwaba 244 (2005) 351

Pulsed laser deposition

Characterization of homoepitaxial and heteroepitaxial ZnO films grown by pulsed laser deposition, Z.Q. Chen, S. Yamamoto, A. Kawasuso, Y. Xu and T. Sekiguchi 244 (2005) 377

Pulsed laser deposition (PLD)

Preparation and properties of bovine serum albumin thin films by pulsed laser deposition, J. Sagawa, S. Nagare and M. Senna 244 (2005) 611

Pure boron

Preparation of pure boron coating film and its characterization by XPS and TDS, M. Oyaidzu, A. Yoshikawa, H. Kodama, Y. Oya, A. Sagara, N. Noda and K. Okuno 244 (2005) 240

Pyrogenic oxidation

Structural defects in SiO_2/SiC interface probed by a slow positron beam, M. Maekawa, A. Kawasuso, Z.Q. Chen, M. Yoshikawa, R. Suzuki and T. Ohdaira 244 (2005) 322

p-ZnO

Growth of ZnO and device applications, K. Iwata, H. Tampo, A. Yamada, P. Fons, K. Matsubara, K. Sakurai, S. Ishizuka and S. Niki 244 (2005) 504

PZT films

Optical characterization of sol–gel deposited PZT thin films by spectroscopic ellipsometry and reflectometry in near-UV and visible regions, D. Franta, I. Ohlídal, J. Mistrík, T. Yamaguchi, G.J. Hu and N. Dai 244 (2005) 338

Quantum dot

Surface elemental segregation and the Stranski–Krastanow epitaxial islanding transition, A.G. Cullis, D.J. Norris, M.A. Migliorato and M. Hopkinson 244 (2005) 65

Control of photoluminescence wavelength from uniform InAs quantum dots by annealing, Y. Kobayashi and K. Yamaguchi 244 (2005) 88

Quantum wire

Surface-related reduction of photoluminescence in GaAs quantum wires and its recovery by new passivation, N. Shiozaki, S. Anantathanasarn, T. Sato, T. Hashizume and H. Hasegawa 244 (2005) 71

Study on ECR dry etching and selective MBE growth of AlGaN/GaN for fabrication of quantum nanostructures on GaN (0 0 0 1) substrates, T. Oikawa, F. Ishikawa, T. Sato, T. Hashizume and H. Hasegawa 244 (2005) 84

Quartz

Optical and structural properties of CVD-grown single crystal SiO_2 using optically detected XAS, T. Nakamura, N. Takahashi, N.R.J. Poolton and A.E.R. Malins 244 (2005) 318

Raman spectroscopy

Nanocrystalline WO_3 films prepared by two-step annealing, A.H. Jayatissa, A. Dadi and T. Aoki 244 (2005) 453

Rapid thermal annealing

Electrical characteristics of V_2O_5 thin films formed on p-Si by sputter-deposition and rapid thermal annealing, M.H. Yoon and S. Im 244 (2005) 444

Rare earth

Vacancy ordering in self-assembled erbium silicide nanowires on atomically clean Si(0 0 1), W.C. Tsai, H.C. Hsu, H.F. Hsu and L.J. Chen 244 (2005) 115

RCWA

Spectroscopic ellipsometry on sinusoidal surface-relief gratings, R. Antos, I. Ohlidal, D. Franta, P. Klapetek, J. Mistrik, T. Yamaguchi and S. Visnovsky 244 (2005) 221

Spectroscopic ellipsometry on lamellar gratings, R. Antos, I. Ohlidal, J. Mistrik, K. Murakami, T. Yamaguchi, J. Pistora, M. Horie and S. Visnovsky 244 (2005) 225

Rectifying behavior

Structural and optical properties of 6,13-pentacenequinone film, D.K. Hwang, K. Kim, J.H. Kim, D.-Y. Jung, E. Kim and S. Im 244 (2005) 615

Red phosphor

Effect of La and Zn addition on Y_2O_3:Eu phosphors, S. Sakuma, H. Kominami, Y. Neo, T. Aoki, Y. Nakanishi and H. Mimura 244 (2005) 458

Reflection high-energy positron diffraction (RHEPD)

Observation of Si(1 1 1)-3 × 3-Ag surface at room temperature by reflection high-energy positron diffrReflectometry0024400051R-eflectometry

Evidence of refractive index change in glass substrates induced by high-density reactive ion plating deposition of SiO_2 films, J. Mistrik, I. Ohlidal, R. Antos, M. Aoyama and T. Yamaguchi 244 (2005) 51

Reflection high-energy positron diffraction study of a Si(0 0 1) surface, K. Hayashi, Y. Fukaya, A. Kawasuso and A. Ichimiya 244 (2005) 145

Positron diffraction study of SiC(0 0 0 1) surface, A. Kawasuso, M. Maekawa, M. Yoshikawa and A. Ichimiya 244 (2005) 149

Reflectometry

Optical characterization of sol–gel deposited PZT thin films by spectroscopic ellipsome-

try and reflectometry in near-UV and visible regions, D. Franta, I. Ohlídal, J. Mistrík, T. Yamaguchi, G.J. Hu and N. Dai 244 (2005) 338
Optical properties of NiO thin films prepared by pulsed laser deposition technique, D. Franta, B. Negulescu, L. Thomas, P.R. Dahoo, M. Guyot, I. Ohlídal, J. Mistrík and T. Yamaguchi 244 (2005) 426
Optical properties of rough $LaNiO_3$ thin films studied by spectroscopic ellipsometry and reflectometry, J. Mistrik, T. Yamaguchi, D. Franta, I. Ohlidal, G.J. Hu and N. Dai 244 (2005) 431

Remote plasma enhanced CVD

Photocatalytic characteristics of hydro-oxygenated amorphous titanium oxide films prepared using remote plasma enhanced chemical vapor deposition, Y. Hatanaka, H. Naito, S. Itou and M. Kando 244 (2005) 554

Remote plasma enhanced metalorganic chemical vapor deposition

Growth and characterization of $Zn_{1-x}Cd_xO$ films using remote plasma MOCVD, J. Ishihara, A. Nakamura, S. Shigemori, T. Aoki and J. Temmyo 244 (2005) 381

Remote plasma enhanced MOCVD

Growth of $Mg_xZn_{1-x}O$ films using remote plasma MOCVD, A. Nakamura, J. Ishihara, S. Shigemori, T. Aoki and J. Temmyo 244 (2005) 385

rf. Magnetron sputtering

Influence of reacting nitrogen gas consistence on the properties of TiN films prepared by rf. magnetron sputtering, Y. Pihosh, M. Goto, A. Kasahara, T. Oishi and M. Tosa 244 (2005) 244

RHEPD

Positron diffraction study of SiC(0 0 0 1) surface, A. Kawasuso, M. Maekawa, M. Yoshikawa and A. Ichimiya 244 (2005) 149

Rhodamine B

Preparation and characterization of Rhodamine B and Alq_3 thin films deposited by solution jet beam method, Y. Okabayashi, T. Mitarai, S. Yamazaki, R. Matsuyama, K. Kanai, Y. Ouchi and K. Seki 244 (2005) 217

Rhodium

Inclined N_2 desorption in N_2O decomposition on Rh(1 1 0), T. Matsushima, K. Imamura, H. Horino, A. Hiratsuka, Y.-S. Ma, I.I. Rzeznicka and O. Nakagoe 244 (2005) 141

Rocking curve

Reflection high-energy positron diffraction study of a Si(0 0 1) surface, K. Hayashi, Y. Fukaya, A. Kawasuso and A. Ichimiya 244 (2005) 145

Scanning tunneling microscopy

Sb adsorption onto In nanocluster array structure formed on a Si(1 1 1)–(7 × 7), M. Saito, C. Takeuchi, M. Mori, T. Tambo and C. Tatsuyama 244 (2005) 137
Surface structure and electronic states of sulfur-treated InP(1 1 1)A studied by LEED, AES, STM, and IPES, M. Shimomura, Y. Sano, N. Sanada, L.L. Cao and Y. Fukuda 244 (2005) 153
The geometry of Bi nanolines on Si(0 0 1), R.H. Miwa, J.M. MacLeod, G.P. Srivastava and A.B. McLean 244 (2005) 157

Scatterometry

Spectroscopic ellipsometry on lamellar gratings, R. Antos, I. Ohlidal, J. Mistrik, K. Murakami, T. Yamaguchi, J. Pistora, M. Horie and S. Visnovsky 244 (2005) 225

Schott B270

Evidence of refractive index change in glass substrates induced by high-density reactive ion plating deposition of SiO_2 films, J. Mistrik, I. Ohlidal, R. Antos, M. Aoyama and T. Yamaguchi 244 (2005) 51

Schottky

Pt Schottky diode gas sensors formed on GaN and AlGaN/GaN heterostructure, K. Matsuo, N. Negoro, J. Kotani, T. Hashizume and H. Hasegawa 244 (2005) 273

Schottky barriers

Local electronic and chemical structure at GaN, AlGaN and SiC heterointerfaces, L.J. Brillson, S.T. Bradley, S.H. Tumakha, S.H. Goss, X.L. Sun, R.S. Okojie, J. Hwang and W.J. Schaff 244 (2005) 257

Scratch test

Microstructures and mechanical properties evaluation of hard chromized austenitic Fe–Mn–Al alloys, J.-W. Lee 244 (2005) 248

SE

Spectroscopic ellipsometry study on TiO_2 thin films modified by N_2–H_2 plasma surface treatment, S. Tanemura, L. Miao, H. Watanabe and Y. Mori 244 (2005) 546

Secondary ion mass spectrometry

Thermal redistribution of hydrogen and boron in SiO_2 in SiN-capped p-type MOSFET structures, Y. Kawashima, S. Aoyagi and M. Kudo 244 (2005) 43

Secondary structure

Preparation and properties of bovine serum albumin thin films by pulsed laser deposition, J. Sagawa, S. Nagare and M. Senna 244 (2005) 611

The secondary structure control of silk fibroin thin films by post treatment, I. Taketani, S. Nakayama, S. Nagare and M. Senna 244 (2005) 623

Selective MBE growth

Study on ECR dry etching and selective MBE growth of AlGaN/GaN for fabrication of quantum nanostructures on GaN (0 0 0 1) substrates, T. Oikawa, F. Ishikawa, T. Sato, T. Hashizume and H. Hasegawa 244 (2005) 84

Self-assembled

Vacancy ordering in self-assembled erbium silicide nanowires on atomically clean Si(0 0 1), W.C. Tsai, H.C. Hsu, H.F. Hsu and L.J. Chen 244 (2005) 115

Self-assembled monolayer

Chain length dependence of adsorption structure of COOH-terminated alkanethiol SAMs on Au(1 1 1), E. Ito, K. Konno, J. Noh, K. Kanai, Y. Ouchi, K. Seki and M. Hara 244 (2005) 584

Self-assembled monolayers

Structure of mercaptoalcohol self-assembled monolayers on Au(1 1 1), K. Tsukamoto, T. Kubo and H. Nozoye 244 (2005) 578

Self-assembly

Sb adsorption onto In nanocluster array structure formed on a Si(1 1 1)–(7 × 7), M. Saito, C. Takeuchi, M. Mori, T. Tambo and C. Tatsuyama 244 (2005) 137

Self-organization

2D lattice formation by YAG:Nd laser on the surface of Ge single crystal, A. Medvid, Y. Fukuda, A. Michko, P. Onufrievs and Y. Anma 244 (2005) 120

Semiconducting properties

Electrical characteristics of V_2O_5 thin films formed on p-Si by sputter-deposition and rapid thermal annealing, M.H. Yoon and S. Im 244 (2005) 444

Semiconductor hetero-epitaxy

The geometry of Bi nanolines on Si(0 0 1), R.H. Miwa, J.M. MacLeod, G.P. Srivastava and A.B. McLean 244 (2005) 157

Semiconductors substrates

Deposition and structural properties of piezoelectric ZnO epitaxial film on p-InP (1 0 0) substrate for FBAR, J.J. Lee, Y.B. Kim and Y.S. Yoon 244 (2005) 365

Semi-transparent NiO

Inverted top-emitting organic light-emitting diodes using transparent conductive NiO electrode, S.-W. Park, J.-M. Choi, E. Kim and S. Im 244 (2005) 439

β-sheet

The secondary structure control of silk fibroin thin films by post treatment, I. Taketani, S. Nakayama, S. Nagare and M. Senna 244 (2005) 623

Si

HRTEM observation of interface states between ZnO epitaxial film and Si(1 1 1) substrate, Y. Nakanishi, A. Miyake, H. Tatsuoka, H. Kominami, H. Kuwabara and Y. Hatanaka 244 (2005) 359

Si quantum dots

Control of the nucleation density of Si quantum dots by remote hydrogen plasma treatment, K. Makihara, H. Deki, H. Murakami, S. Higashi and S. Miyazaki 244 (2005) 75

Si substrate

Preparation of CaS:Cu,F thin-film electroluminescent devices with an emission including purple region, S. Hakamata, M. Ehara, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 469

Si surface reaction

Theoretical study on hydrogen reaction processes on H/Si(0 0 1) surface, N. Takahashi, J. Nara, T. Uda, Y. Nakamura, Y. Tateyama and T. Ohno 244 (2005) 190

Si(0 0 1)

Reflection high-energy positron diffraction study of a Si(0 0 1) surface, K. Hayashi, Y. Fukaya, A. Kawasuso and A. Ichimiya 244 (2005) 145

Si(1 0 0) surface

STM observation of Bi line structures on the Si(1 0 0) surface with Ag deposition, T. Itoh, S. Kashirajima, M. Naitoh, S. Nishigaki and F. Shoji 244 (2005) 161

SiC

Local electronic and chemical structure at GaN, AlGaN and SiC heterointerfaces, L.J. Brillson, S.T. Bradley, S.H. Tumakha, S.H. Goss, X.L. Sun, R.S. Okojie, J. Hwang and W.J. Schaff 244 (2005) 257

SiC(0 0 0 1)

Positron diffraction study of SiC(0 0 0 1) surface, A. Kawasuso, M. Maekawa, M. Yoshikawa and A. Ichimiya 244 (2005) 149

Silica glass

Optical effects in silica glass during implantation of 60 keV Cu^- ions, O.A. Plaksin, Y. Takeda, K. Kono, H. Amekura, N. Umeda and N. Kishimoto 244 (2005) 79

Silicate

Incorporation of SiO_2 for the band alignment control of Gd_2O_3/*n*-GaAs(0 0 1) structure, J.-K. Yang and H.-H. Park 244 (2005) 293

Silicide

Vacancy ordering in self-assembled erbium silicide nanowires on atomically clean Si(0 0 1), W.C. Tsai, H.C. Hsu, H.F. Hsu and L.J. Chen 244 (2005) 115

Silicides

Growth and morphological properties of β-$FeSi_2$ layers, S. Tanaka, A. Yamamoto, S. Makiuchi, T. Matsuyama, M. Rebien, W. Henrion, H. Tatsuoka, M. Tanaka, Z.-Q. Liu and H. Kuwabara 244 (2005) 326

Growth and structural properties of Mg_2Si and Ca_2Si bulk crystals, N. Takagi, Y. Sato, T. Matsuyama, H. Tatsuoka, M. Tanaka, C. Fengmin and H. Kuwabara 244 (2005) 330

Silicon

Sb adsorption onto In nanocluster array structure formed on a Si(1 1 1)–(7 × 7), M. Saito, C. Takeuchi, M. Mori, T. Tambo and C. Tatsuyama 244 (2005) 137

Silicone index change in glass substrates induced by high-density reactive ion plating deposition of SiO_2 films, J. Mistrik, I. Ohlidal, R. Antos, M. Aoyama and T. Yamaguchi 244 (2005) 51

Silicon surface

Carbon nanotube adsorbed on hydrogenated Si(0 0 1) surfaces, R.H. Miwa, W. Orellana and A. Fazzio 244 (2005) 124
The geometry of Bi nanolines on Si(0 0 1), R.H. Miwa, J.M. MacLeod, G.P. Srivastava and A.B. McLean 244 (2005) 157

Silk fibroin (SF)

The secondary structure control of silk fibroin thin films by post treatment, I. Taketani, S. Nakayama, S. Nagare and M. Senna 244 (2005) 623
SIMe index change in glass substrates induced by high-density reactive ion plating deposition of SiO_2 films, J. Mistrik, I. Ohlidal, R. Antos, M. Aoyama and T. Yamaguchi 244 (2005) 51
Chemical properties of an oxide nanoskin on a polymeric surface, A. Hozumi and N. Shirahata 244 (2005) 334

Si_3N_4

Influence of Si_3N_4 and ZnS films on transmittance of InAsSb/InAsPSb heterostructures, Y.Z. Gao, X.Y. Gong, W.Z. Fang, H.Y. Deng, G.J. Hu, M. Aoyama, T. Yamaguchi and N. Dai 244 (2005) 297

Sinusoidal grating

Spectroscopic ellipsometry on sinusoidal surface-relief gratings, R. Antos, I. Ohlidal, D. Franta, P. Klapetek, J. Mistrik, T. Yamaguchi and S. Visnovsky 244 (2005) 221

SiO_2 surface

Infrared spectroscopy of pentacene thin film on SiO_2 surface, Y. Hosoi, K. Okamura, Y. Kimura, H. Ishii and M. Niwano 244 (2005) 607

SiO_2/glass interface

Evidence of refractive index change in glass substrates induced by high-density reactive ion plating deposition of SiO_2 films, J. Mistrik, I. Ohlidal, R. Antos, M. Aoyama and T. Yamaguchi 244 (2005) 51

SiO_2/SiC interface

Structural defects in SiO_2/SiC interface probed by a slow positron beam, M. Maekawa, A. Kawasuso, Z.Q. Chen, M. Yoshikawa, R. Suzuki and T. Ohdaira 244 (2005) 322

Silver

Observation of Si(1 1 1)- $\sqrt{3} \times \sqrt{3}$-Ag surface at room temperature by reflection high-energy positron diffraction, Y. Fukaya, A. Kawasuso, K. Hayashi and A. Ichimiya 244 (2005) 166

Smith–Purcell radiation

Emission characteristics and application of semiconductor field emitters, H. Mimura, Y. Neo, H. Shimawaki, T. Matsumoto and K. Yokoo 244 (2005) 498

Solar cell

Effect of AZO film deposition conditions on the photovoltaic properties of AZO–Cu_2O heterojunctions, H. Tanaka, T. Shimakawa, T. Miyata, H. Sato and T. Minami 244 (2005) 568

Sol–gel

Diffusion of Li in the silicon oxide films and evaluation of Li-induced surface potential, M. Maeda, T. Watanabe, Y. Imai, Y. Ishikawa and M. Tabe 244 (2005) 61
Measurements of critical micelle concentration (CMC) using optical fiber covered with porous sol–gel cladding, H. Isobe, C.D. Singh, H. Katsumata, H. Suzuki, T. Fujinami and M. Ogita 244 (2005) 199

Solid oxide fuel cell

Large-scale calculations of solid oxide fuel cell cermet anode by tight-binding quantum chemistry method, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 598

Solid–aqueous solution interface

Computational chemistry study of solid and aqueous solution interface, U. Mart, C. Jung, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 640

Solvent effects

Density functional theory studies on decomposition of ethyl-palladium complexes: an important role of cationic species,

R. Raharintsalama, H. Munakata, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 631

Space-charge-limited current

Impact ionization phenomenon in single-crystalline rutile TiO_2, H. Hashimoto, T. Teraji and T. Ito 244 (2005) 394

Spectroscopic ellipsometry

Spectroscopic ellipsometry on sinusoidal surface-relief gratings, R. Antos, I. Ohlidal, D. Franta, P. Klapetek, J. Mistrik, T. Yamaguchi and S. Visnovsky 244 (2005) 221
Spectroscopic ellipsometry on lamellar gratings, R. Antos, I. Ohlidal, J. Mistrik, K. Murakami, T. Yamaguchi, J. Pistora, M. Horie and S. Visnovsky 244 (2005) 225

Spray

Preparation and characterization of Rhodamine B and Alq_3 thin films deposited by solution jet beam method, Y. Okabayashi, T. Mitarai, S. Yamazaki, R. Matsuyama, K. Kanai, Y. Ouchi and K. Seki 244 (2005) 217

Sputtering

Novel green thin-film electroluminescent devices utilizing ZnS nanocrystals doped with Tb compounds, T. Toyama, K. Yoshimura, M. Fujii, H. Haze and H. Okamoto 244 (2005) 524
Effects of Zn-doping on red-luminescence in Eu-doped (Mg,Ca)S phosphor films, S. Tokunaga and A. Mikami 244 (2005) 533

Sputtering deposition

Influence of thickness of Hf buffer layer on the interfacial structures of sputtered HfO_2 on SiO_2/Si, R. Tan, Y. Azuma and I. Kojima 244 (2005) 21

$SrGa_2S_4$:Eu

Luminescent properties of $SrGa_2S_4$:Eu thin film phosphors deposited by two electron beam evaporation, Y. Arai, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 473

Static induction transistor

Fabrication of organic static induction transistors with higher order structures, J.C. Mathew, N. Hirashima, M. Nakamura, M. Iizuka and K. Kudo 244 (2005) 603

STM

STM observation of Bi line structures on the Si(1 0 0) surface with Ag deposition, T. Itoh, S. Kashirajima, M. Naitoh, S. Nishigaki and F. Shoji 244 (2005) 161
Oxidization process of CVD diamond (1 0 0):H 2×1 surfaces, J. Nakamura and T. Ito 244 (2005) 301
Photoresponse of surface oxygen defects on TiO_2(1 1 0), M. Komiyama and Y.-J. Li 244 (2005) 550
Chain length dependence of adsorption structure of COOH-terminated alkanethiol SAMs on Au(1 1 1), E. Ito, K. Konno, J. Noh, K. Kanai, Y. Ouchi, K. Seki and M. Hara 244 (2005) 584

Stokes shift

Growth of $Mg_xZn_{1-x}O$ films using remote plasma MOCVD, A. Nakamura, J. Ishihara, S. Shigemori, T. Aoki and J. Temmyo 244 (2005) 385

Strain

Strain relaxation near high-k/Si interface by post-deposition annealing, T. Emoto, K. Akimoto, Y. Yoshida, A. Ichimiya, T. Nabatame and A. Toriumi 244 (2005) 55

Strain distribution in the surface

Depth profiling of the strain distribution in the surface layer using X-ray diffraction at small glancing angle of incidence, Y. Fujii, E. Yanase and K. Arai 244 (2005) 230

Stranski–Krastanow transition

Surface elemental segregation and the Stranski–Krastanow epitaxial islanding transition, A.G. Cullis, D.J. Norris, M.A. Migliorato and M. Hopkinson 244 (2005) 65

Strontium titanate

Study of thin films of carrier-doped strontium titanate with emphasis on their interfaces with organic thin films, N. Sato, Y. Harada, T. Terashima, R. Kanda and M. Takano 244 (2005) 588

Structural phase transition

An empirical potential approach to structural stability of GaN_xAs_{1-x} thin films on GaAs(1 1 1), T. Ito, T. Suda, T. Akiyama and K. Nakamura 244 (2005) 170

Structural properties

Growth and morphological properties of β-$FeSi_2$ layers, S. Tanaka, A. Yamamoto, S. Makiuchi, T. Matsuyama, M. Rebien, W. Henrion, H. Tatsuoka, M. Tanaka, Z.-Q. Liu and H. Kuwabara 244 (2005) 326

Growth and structural properties of Mg_2Si and Ca_2Si bulk crystals, N. Takagi, Y. Sato, T. Matsuyama, H. Tatsuoka, M. Tanaka, C. Fengmin and H. Kuwabara 244 (2005) 330

Structural stability

An empirical potential approach to dislocation formation and structural stability in GaN_xAs_{1-x}, K. Kawamoto, T. Suda, T. Akiyama, K. Nakamura and T. Ito 244 (2005) 182

p–i–p structure

Electrical properties of diamond *p–i–p* structures at high electric fields, M. Yamamoto, T. Watanabe, M. Hamada, T. Teraji and T. Ito 244 (2005) 310

Structure

Structure of mercaptoalcohol self-assembled monolayers on Au(1 1 1), K. Tsukamoto, T. Kubo and H. Nozoye 244 (2005) 578

Substrate bias

Influence of substrate dc bias on crystallinity of silicon films grown at a high rate from inductively-coupled plasma CVD, N. Kosku, H. Murakami, S. Higashi and S. Miyazaki 244 (2005) 39

Sulfide

Effects of Zn-doping on red-luminescence in Eu-doped (Mg,Ca)S phosphor films, S. Tokunaga and A. Mikami 244 (2005) 533

Superlattice

Zn_3N_2 compensated ZnTe films and ZnTe–ZnSe superlattices grown by hot wall epitaxy, S. Sakakibara, Y. Inoue, H. Mimura, K. Ishino, A. Ishida and H. Fujiyasu 244 (2005) 343

Superlattice doping

Enhancement of donor ionization in phosphorus-doped n-diamond, Y. Koide 244 (2005) 26

Supermagnetron plasma

Formation of wide and narrow optical-band-gap amorphous-CN_x:H films using *i*-C_4H_{10}/N_2 supermagnetron plasma, H. Kinoshita, R. Ikuta and K. Sakurai 244 (2005) 314

Surface

Study of active surface centers in electroluminescent ZnS:Cu,Cl phosphors, M.M. Sychov, S.V. Mjakin, Y. Nakanishi, V.G. Korsakov, I.V. Vasiljeva, V.V. Bakhmetjev, O.V. Solovjeva and E.V. Komarov 244 (2005) 461

Electronic-state control of amino acids on semiconductor surfaces, M. Oda and T. Nakayama 244 (2005) 627

Surface chemical reaction

Unoccupied electronic band structure of conjugated molecular films interfacing polycrystalline gold surface, A. Komolov and P.J. Møller 244 (2005) 573

Surface electronic phenomena

Unoccupied electronic band structure of conjugated molecular films interfacing polycrystalline gold surface, A. Komolov and P.J. Møller 244 (2005) 573

Surface electrons

Atomic-scale theoretical investigations of compound semiconductor surfaces, G.P. Srivastava 244 (2005) 129

Surface energy

Influence of reacting nitrogen gas consistence on the properties of TiN films prepared by

rf. magnetron sputtering, Y. Pihosh, M. Goto, A. Kasahara, T. Oishi and M. Tosa 244 (2005) 244

Surface passivation

Surface-related reduction of photoluminescence in GaAs quantum wires and its recovery by new passivation, N. Shiozaki, S. Anantathanasarn, T. Sato, T. Hashizume and H. Hasegawa 244 (2005) 71

Surface phase transition

Theoretical investigation of phase transition on GaAs(0 0 1)-c(4 × 4) surface, H. Ishizaki, T. Akiyama, K. Nakamura, K. Shiraishi, A. Taguchi and T. Ito 244 (2005) 186

Surface phonons

Atomic-scale theoretical investigations of compound semiconductor surfaces, G.P. Srivastava 244 (2005) 129

Surface potential

Diffusion of Li in the silicon oxide films and evaluation of Li-induced surface potential, M. Maeda, T. Watanabe, Y. Imai, Y. Ishikawa and M. Tabe 244 (2005) 61

Surface reconstructions

Atomic-scale theoretical investigations of compound semiconductor surfaces, G.P. Srivastava 244 (2005) 129

Surface relaxation and reconstruction

Surface structure and electronic states of sulfur-treated InP(1 1 1)A studied by LEED, AES, STM, and IPES, M. Shimomura, Y. Sano, N. Sanada, L.L. Cao and Y. Fukuda 244 (2005) 153

Surface states

Surface-related reduction of photoluminescence in GaAs quantum wires and its recovery by new passivation, N. Shiozaki, S. Anantathanasarn, T. Sato, T. Hashizume and H. Hasegawa 244 (2005) 71

Surface structure

STM observation of Bi line structures on the Si(1 0 0) surface with Ag deposition, T. Itoh, S. Kashirajima, M. Naitoh, S. Nishigaki and F. Shoji 244 (2005) 161
Evidence of refractive index change in glass substrates induced by high-density reactive ion plating deposition of SiO_2 films, J. Mistrik, I. Ohlidal, R. Antos, M. Aoyama and T. Yamaguchi 244 (2005) 51
Chemical properties of an oxide nanoskin on a polymeric surface, A. Hozumi and N. Shirahata 244 (2005) 334
Characterisation of amorphous GaN films, J.B. Metson, B.J. Ruck, F. Budde, H.J. Trodahl, A. Bittar and K.E. Prince 244 (2005) 264

Surfaces

Atomic-scale theoretical investigations of compound semiconductor surfaces, G.P. Srivastava 244 (2005) 129

Surfactant

Electrical and mechanical properties of surfactant-templated mesoporous silica thin films using Brij-76 surfactant, S.-B. Jung, C.-K. Han and H.-H. Park 244 (2005) 47

Surfactants

Measurements of critical micelle concentration (CMC) using optical fiber covered with porous sol–gel cladding, H. Isobe, C.D. Singh, H. Katsumata, H. Suzuki, T. Fujinami and M. Ogita 244 (2005) 199

Synchrotron radiation

In situ X-ray diffraction study of crystallization process of GeSbTe thin films during heat treatment, N. Kato, I. Konomi, Y. Seno and T. Motohiro 244 (2005) 281
Titanium dioxide surface stoichiometry and ordering studied by resonant photoemission spectroscopy, S. Bourgeois, B. Domenichini, Z. Li and P.J. Møller 244 (2005) 399
Reactivity between molybdenum and TiO_2(1 1 0) surfaces: evidence of a submonolayer mode and a multilayer mode, B. Domenichini, P. Krüger, A. Brevet, S. Bourgeois, Z. Li and P.J. Møller 244 (2005) 403

TDS

Preparation of pure boron coating film and its characterization by XPS and TDS, M. Oyaidzu, A. Yoshikawa, H. Kodama, Y. Oya, A. Sagara, N. Noda and K. Okuno 244 (2005) 240

TEM

Structural and compositional characterization of N_2–H_2 plasma surface-treated TiO_2 thin films, L. Miao, S. Tanemura, H. Watanabe, S. Toh and K. Kaneko 244 (2005) 412

Thermal plasma jet

A new crystallization technique of Si films on glass substrate using thermal plasma jet, H. Kaku, S. Higashi, H. Taniguchi, H. Murakami and S. Miyazaki 244 (2005) 8

Thermally evaporated

Inverted top-emitting organic light-emitting diodes using transparent conductive NiO electrode, S.-W. Park, J.-M. Choi, E. Kim and S. Im 244 (2005) 439

Thin film

Modelling of columnar growth in continuum ballistic deposition, Y. Enomoto and M. Taguchi 244 (2005) 213

HRTEM observation of interface states between ZnO epitaxial film and Si(1 1 1) substrate, Y. Nakanishi, A. Miyake, H. Tatsuoka, H. Kominami, H. Kuwabara and Y. Hatanaka 244 (2005) 359

Sb excimer-laser doping in ZnO films prepared by oxidation of sulfide on Si, K. Ohara, T. Seino, A. Nakamura, T. Aoki, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 369

Thickness dependence of optical properties of VO_2 thin films epitaxially grown on sapphire (0 0 0 1), G. Xu, P. Jin, M. Tazawa and K. Yoshimura 244 (2005) 449

Effect of ITO surface state to the aging characteristics of thin film OLED, Y. Fukushi, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 537

Spectroscopic ellipsometry study on TiO_2 thin films modified by N_2–H_2 plasma surface treatment, S. Tanemura, L. Miao, H. Watanabe and Y. Mori 244 (2005) 546

Chlorine gas sensors with high sensitivity using Mg-phthalocyanine thin films, T. Miyata and T. Minami 244 (2005) 563

An empirical potential approach to structural stability of GaN_xAs_{1-x} thin films on GaAs(1 1 1), T. Ito, T. Suda, T. Akiyama and K. Nakamura 244 (2005) 170

Determination of interface roughness of Gd films deposited on Si surface using improved wavelet transform of X-ray reflectivity data, O. Starykov and K. Sakurai 244 (2005) 235

Characterisation of amorphous GaN films, J.B. Metson, B.J. Ruck, F. Budde, H.J. Trodahl, A. Bittar and K.E. Prince 244 (2005) 264

Transport and magnetic properties of Ce-doped $LaMnO_3$ thin films, T. Yanagida, T. Kanki, B. Vilquin, H. Tanaka and T. Kawai 244 (2005) 355

Structural and compositional characterization of N_2–H_2 plasma surface-treated TiO_2 thin films, L. Miao, S. Tanemura, H. Watanabe, S. Toh and K. Kaneko 244 (2005) 412

Nanocrystalline WO_3 films prepared by two-step annealing, A.H. Jayatissa, A. Dadi and T. Aoki 244 (2005) 453

Luminescent properties of $SrGa_2S_4$:Eu thin film phosphors deposited by two electron beam evaporation, Y. Arai, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 473

Investigation on transport properties of strained $La_{0.85}Ba_{0.15}MnO_3$ thin films using hall measurement, T. Kanki, T. Yanagida, B. Vilquin, H. Tanaka and T. Kawai 244 (2005) 481

Effect of Sr doping on $LaTiO_3$ thin films, B. Vilquin, T. Kanki, T. Yanagida, H. Tanaka and T. Kawai 244 (2005) 494

Microcavity effects and the outcoupling of light in displays and lighting applications based on thin emitting films, K. Neyts 244 (2005) 517

Novel green thin-film electroluminescent devices utilizing ZnS nanocrystals doped with Tb compounds, T. Toyama, K. Yoshimura, M. Fujii, H. Haze and H. Okamoto 244 (2005) 524

Thin-film transistor

A new crystallization technique of Si films on glass substrate using thermal plasma jet, H. Kaku, S. Higashi, H. Taniguchi, H. Murakami and S. Miyazaki 244 (2005) 8

Three-dimensional photonic crystals

Atomic layer deposition in porous structures: 3D photonic crystals, J.S. King, D. Heineman, E. Graugnard and C.J. Summers 244 (2005) 511

Ti/n-type GaN

Photoemission study on interfacial reaction of Ti/n-type GaN, T. Naono, J. Okabayashi, S. Toyoda, H. Fujioka, M. Oshima and H. Hamamatsu 244 (2005) 277

Tight-binding quantum chemical calculation

Large-scale calculations of solid oxide fuel cell cermet anode by tight-binding quantum chemistry method, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 598

Tight-binding quantum chemical molecular dynamics

Tight-binding quantum chemical molecular dynamics simulation of boron activation process in crystalline silicon, T. Masuda, K. Sasata, M. Elanany, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 30

Tight-binding quantum chemical molecular dynamics simulation of mechano-chemical reactions during chemical–mechanical polishing process of SiO_2 surface by CeO_2 particle, A. Rajendran, Y. Takahashi, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 34

Photocatalytic oxidation dynamics of acetone on TiO_2: tight-binding quantum chemical molecular dynamics study, C. Lv, X. Wang, G. Agalya, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 541

Periodic density functional and tight-binding quantum chemical molecular dynamics study of surface hydroxyl groups on ZrO_2(111)-supported Pt catalyst, C. Jung, M. Koyama, M. Kubo, A. Imamura and A. Miyamoto 244 (2005) 644

Time-dependent density functional theory

Theoretical study on the electronic and molecular properties of ground and excited states of ethylenedioxythiophene and styrenesulphonic acid, G. Agalya, C. Lv, X. Wang, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 195

TiN

Influence of reacting nitrogen gas consistence on the properties of TiN films prepared by rf. magnetron sputtering, Y. Pihosh, M. Goto, A. Kasahara, T. Oishi and M. Tosa 244 (2005) 244

Corrosion and cell adhesion behavior of TiN-coated and ion-nitrided titanium for dental applications, H.-H. Huang, C.-H. Hsu, S.-J. Pan, J.-L. He, C.-C. Chen and T.-L. Lee 244 (2005) 252

TiO_2

Nano-photocatalytic decomposition of a stearic acid film deposited on the TiO_2 by an atomic force microscope, K. Kobayashi, Y. Tomita, K. Matsuhisa and Y. Doi 244 (2005) 389

Impact ionization phenomenon in single-crystalline rutile TiO_2, H. Hashimoto, T. Teraji and T. Ito 244 (2005) 394

Spectroscopic ellipsometry study on TiO_2 thin films modified by N_2–H_2 plasma surface treatment, S. Tanemura, L. Miao, H. Watanabe and Y. Mori 244 (2005) 546

TiO_2 film

Photocatalytic characteristics of hydro-oxygenated amorphous titanium oxide films prepared using remote plasma enhanced chemical vapor deposition, Y. Hatanaka[a], H. Naito[b], S. Itou[c] and M. Kando[b] 244 (2005) 554

TiO_2 surface

Titanium dioxide surface stoichiometry and ordering studied by resonant photoemission spectroscopy, S. Bourgeois, B. Domenichini, Z. Li and P.J. Møller 244 (2005) 399

Reactivity between molybdenum and TiO_2(1 1 0) surfaces: evidence of a submonolayer mode and a multilayer mode, B. Domenichini, P. Krüger, A. Brevet, S. Bourgeois, Z. Li and P.J. Møller 244 (2005) 403

Titanium

Corrosion and cell adhesion behavior of TiN-coated and ion-nitrided titanium for dental applications, H.-H. Huang, C.-H. Hsu, S.-J. Pan, J.-L. He, C.-C. Chen and T.-L. Lee 244 (2005) 252

Titanium dioxide

Photocatalytic chemisorption of water on titanium dioxide thin films obtained by radio frequency magnetron deposition, L. Sirghi, Y. Hatanaka and T. Aoki 244 (2005) 408

Structural and compositional characterization of N_2–H_2 plasma surface-treated TiO_2 thin films, L. Miao, S. Tanemura, H. Watanabe, S. Toh and K. Kaneko 244 (2005) 412

Photocatalytic oxidation dynamics of acetone on TiO_2: tight-binding quantum chemical

molecular dynamics study, C. Lv, X. Wang, G. Agalya, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 541
Photoresponse of surface oxygen defects on TiO_2(1 1 0), M. Komiyama and Y.-J. Li 244 (2005) 550

Top-emitting organic light-emitting device (TE-OLED)

Inverted top-emitting organic light-emitting diodes using transparent conductive NiO electrode, S.-W. Park, J.-M. Choi, E. Kim and S. Im 244 (2005) 439

Total reflection

Reflection high-energy positron diffraction study of a Si(0 0 1) surface, K. Hayashi, Y. Fukaya, A. Kawasuso and A. Ichimiya 244 (2005) 145
Positron diffraction study of SiC(0 0 0 1) surface, A. Kawasuso, M. Maekawa, M. Yoshikawa and A. Ichimiya 244 (2005) 149

Transistor characteristics

Fabrication of organic static induction transistors with higher order structures, J.C. Mathew, N. Hirashima, M. Nakamura, M. Iizuka and K. Kudo 244 (2005) 603

Transition energy

Theoretical study on the electronic and molecular properties of ground and excited states of ethylenedioxythiophene and styrenesulphonic acid, G. Agalya, C. Lv, X. Wang, M. Koyama, M. Kubo and A. Miyamoto 244 (2005) 195

Transmission electron microscopy (TEM)

Growth and morphological properties of β-$FeSi_2$ layers, S. Tanaka, A. Yamamoto, S. Makiuchi, T. Matsuyama, M. Rebien, W. Henrion, H. Tatsuoka, M. Tanaka, Z.-Q. Liu and H. Kuwabara 244 (2005) 326
Growth and structural properties of Mg_2Si and Ca_2Si bulk crystals, N. Takagi, Y. Sato, T. Matsuyama, H. Tatsuoka, M. Tanaka, C. Fengmin and H. Kuwabara 244 (2005) 330

Transmittance

Influence of Si_3N_4 and ZnS films on transmittance of InAsSb/InAsPSb heterostructures, Y.Z. Gao, X.Y. Gong, W.Z. Fang, H.Y. Deng, G.J. Hu, M. Aoyama, T. Yamaguchi and N. Dai 244 (2005) 297

Transparent electrode

Study of thin films of carrier-doped strontium titanate with emphasis on their interfaces with organic thin films, N. Sato, Y. Harada, T. Terashima, R. Kanda and M. Takano 244 (2005) 588

Trimethylphosphine

Growth and characterization of P-doped CVD diamond (1 1 1) thin films homoepitaxially grown using trimethylphosphine, H. Wada, T. Teraji and T. Ito 244 (2005) 305

Ttribology

Influence of reacting nitrogen gas consistence on the properties of TiN films prepared by rf. magnetron sputtering, Y. Pihosh, M. Goto, A. Kasahara, T. Oishi and M. Tosa 244 (2005) 244

Tungsten oxide

Nanocrystalline WO_3 films prepared by two-step annealing, A.H. Jayatissa, A. Dadi and T. Aoki 244 (2005) 453

Two-carrier model

Growth and characterization of P-doped CVD diamond (1 1 1) thin films homoepitaxially grown using trimethylphosphine, H. Wada, T. Teraji and T. Ito 244 (2005) 305

Ultra water-repellency

Transparent ultra water-repellent poly(ethylene terephthalate) substrates fabricated by oxygen plasma treatment and subsequent hydrophobic coating, K. Teshima, H. Sugimura, Y. Inoue, O. Takai and A. Takano 244 (2005) 619

Ultrasonic process

Fabrication of organic static induction transistors with higher order structures, J.C. Mathew, N. Hirashima, M. Nakamura, M. Iizuka and K. Kudo 244 (2005) 603

UV–vis light

Ultraviolet enhanced Si-photodetector using p-NiO films, J.-M. Choi and S. Im 244 (2005) 435

Vacuum ultraviolet

Chemical properties of an oxide nanoskin on a polymeric surface, A. Hozumi and N. Shirahata 244 (2005) 334

Vanadium dioxide

Thickness dependence of optical properties of VO_2 thin films epitaxially grown on sapphire (0 0 0 1), G. Xu, P. Jin, M. Tazawa and K. Yoshimura 244 (2005) 449

VASP

Reactivity between molybdenum and TiO_2(1 1 0) surfaces: evidence of a submonolayer mode and a multilayer mode, B. Domenichini, P. Krüger, A. Brevet, S. Bourgeois, Z. Li and P.J. Møller 244 (2005) 403

Visible light

Photoresponse of surface oxygen defects on TiO_2(1 1 0), M. Komiyama and Y.-J. Li 244 (2005) 550

V_2O_5

Electrical characteristics of V_2O_5 thin films formed on p-Si by sputter-deposition and rapid thermal annealing, M.H. Yoon and S. Im 244 (2005) 444

Water photocatalytic chemisorption

Photocatalytic chemisorption of water on titanium dioxide thin films obtained by radio frequency magnetron deposition, L. Sirghi, Y. Hatanaka and T. Aoki 244 (2005) 408

Wavelet transform

Determination of interface roughness of Gd films deposited on Si surface using improved wavelet transform of X-ray reflectivity data, O. Starykov and K. Sakurai 244 (2005) 235

Wear test

Microstructures and mechanical properties evaluation of hard chromized austenitic Fe–Mn–Al alloys, J.-W. Lee 244 (2005) 248

Wood anomaly

Spectroscopic ellipsometry on sinusoidal surface-relief gratings, R. Antos, I. Ohlidal, D. Franta, P. Klapetek, J. Mistrik, T. Yamaguchi and S. Visnovsky 244 (2005) 221

Spectroscopic ellipsometry on lamellar gratings, R. Antos, I. Ohlidal, J. Mistrik, K. Murakami, T. Yamaguchi, J. Pistora, M. Horie and S. Visnovsky 244 (2005) 225

XPS

Influence of thickness of Hf buffer layer on the interfacial structures of sputtered HfO_2 on SiO_2/Si, R. Tan, Y. Azuma and I. Kojima 244 (2005) 21

Preparation of pure boron coating film and its characterization by XPS and TDS, M. Oyaidzu, A. Yoshikawa, H. Kodama, Y. Oya, A. Sagara, N. Noda and K. Okuno 244 (2005) 240

Chain length dependence of adsorption structure of COOH-terminated alkanethiol SAMs on Au(1 1 1), E. Ito, K. Konno, J. Noh, K. Kanai, Y. Ouchi, K. Seki and M. Hara 244 (2005) 584

X-ray reflectivity

Determination of interface roughness of Gd films deposited on Si surface using improved wavelet transform of X-ray reflectivity data, Oleksiy Starykov and Kenji Sakurai 244 (2005) 235

X-ray diffraction

In situ X-ray diffraction study of crystallization process of GeSbTe thin films during heat treatment, N. Kato, I. Konomi, Y. Seno and T. Motohiro 244 (2005) 281

YAG:Nd laser

2D lattice formation by YAG:Nd laser on the surface of Ge single crystal, A. Medvid, Y. Fukuda, A. Michko, P. Onufrievs and Y. Anma 244 (2005) 120

$(Y_{1-x}La_x)_2O_3$:Eu,Zn

Effect of La and Zn addition on Y_2O_3:Eu phosphors, S. Sakuma, H. Kominami, Y. Neo, T. Aoki, Y. Nakanishi and H. Mimura 244 (2005) 458

$Zn_{1-x}Cd_xO$

Growth and characterization of $Zn_{1-x}Cd_xO$ films using remote plasma MOCVD, J. Ishihara, A. Nakamura, S. Shigemori, T. Aoki and J. Temmyo 244 (2005) 381

ZnO

HRTEM observation of interface states between ZnO epitaxial film and Si(1 1 1) substrate, Y. Nakanishi, A. Miyake, H. Tatsuoka, H. Kominami, H. Kuwabara and Y. Hatanaka 244 (2005) 359

Sb excimer-laser doping in ZnO films prepared by oxidation of sulfide on Si, K. Ohara, T. Seino, A. Nakamura, T. Aoki, H. Kominami, Y. Nakanishi and Y. Hatanaka 244 (2005) 369

Homoepitaxial growth of ZnO films on ZnO (1 1 2 0) substrates, Y. Kashiwaba, H. Kato, T. Kikuchi, I. Niikura, K. Matsushita and Y. Kashiwaba 244 (2005) 373

Characterization of homoepitaxial and heteroepitaxial ZnO films grown by pulsed laser deposition, Z.Q. Chen, S. Yamamoto, A. Kawasuso, Y. Xu and T. Sekiguchi 244 (2005) 377

Growth of ZnO and device applications, K. Iwata, H. Tampo, A. Yamada, P. Fons, K. Matsubara, K. Sakurai, S. Ishizuka and S. Niki 244 (2005) 504

Effect of AZO film deposition conditions on the photovoltaic properties of AZO–Cu_2O heterojunctions, H. Tanaka, T. Shimakawa, T. Miyata, H. Sato and T. Minami 244 (2005) 568

ZnO film

Deposition and structural properties of piezoelectric ZnO epitaxial film on p-InP (1 0 0) substrate for FBAR, J.J. Lee, Y.B. Kim and Y.S. Yoon 244 (2005) 365

ZnO on Si

Growth of ZnO and device applications, K. Iwata, H. Tampo, A. Yamada, P. Fons, K. Matsubara, K. Sakurai, S. Ishizuka and S. Niki 244 (2005) 504

ZnO sheath

Growth of ZnS nanocombs with ZnO sheath by thermal evaporation, M.Y. Lu, P.Y. Su, Y.L. Chueh, L.J. Chen and L.J. Chou 244 (2005) 96

ZnOSe

Growth of ZnO and device applications, K. Iwata, H. Tampo, A. Yamada, P. Fons, K. Matsubara, K. Sakurai, S. Ishizuka and S. Niki 244 (2005) 504

ZnS

Growth of ZnS nanocombs with ZnO sheath by thermal evaporation, M.Y. Lu, P.Y. Su, Y.L. Chueh, L.J. Chen and L.J. Chou 244 (2005) 96

Influence of Si_3N_4 and ZnS films on transmittance of InAsSb/InAsPSb heterostructures, Y.Z. Gao, X.Y. Gong, W.Z. Fang, H.Y. Deng, G.J. Hu, M. Aoyama, T. Yamaguchi and N. Dai 244 (2005) 297

HRTEM observation of interface states between ZnO epitaxial film and Si(1 1 1) substrate, Y. Nakanishi, A. Miyake, H. Tatsuoka, H. Kominami, H. Kuwabara and Y. Hatanaka 244 (2005) 359

Study of active surface centers in electroluminescent ZnS:Cu,Cl phosphors, M.M. Sychov, S.V. Mjakin, Y. Nakanishi, V.G. Korsakov, I.V. Vasiljeva, V.V. Bakhmetjev, O.V. Solovjeva and E.V. Komarov 244 (2005) 461

$ZnS:Mn^{2+}$

Characterization on thermal stability of $ZnS:Mn^{2+}/MPS/SiO_2$ nano-phosphor film, H. Kubo, T. Isobe, H. Takahashi and S. Itoh 244 (2005) 465

ZnSe

Zn_3N_2 compensated ZnTe films and ZnTe–ZnSe superlattices grown by hot wall epitaxy, S. Sakakibara, Y. Inoue, H. Mimura, K. Ishino, A. Ishida and H. Fujiyasu 244 (2005) 343

ZnTe

Zn_3N_2 compensated ZnTe films and ZnTe–ZnSe superlattices grown by hot wall epitaxy, S. Sakakibara, Y. Inoue, H. Mimura, K. Ishino, A. Ishida and H. Fujiyasu 244 (2005) 343

ZrO_2

Periodic density functional and tight-binding quantum chemical molecular dynamics study of surface hydroxyl groups on $ZrO_2(111)$-supported Pt catalyst, C. Jung, M. Koyama, M. Kubo, A. Imamura and A. Miyamoto 244 (2005) 644